Croonian Lectures

ON THE

HYGIENIC AND CLIMATIC TREATMENT OF CHRONIC PULMONARY PHTHISIS.

Delivered at the Royal College of Physicians,

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LECTURE III.

(*Concluded from page 695.*)

Duration of stay, and season of the year.—The time during which an invalid ought to stay in elevated regions varies greatly, according to the nature of the case, from four and six months to as many years, and general rules can scarcely be laid down. He ought to remain until he is cured, or until it is seen that the climate does not suit him. An additional advantage of these climates is that the majority of patients can remain throughout a whole year, with occasional changes to allied, not to distant, localities. The winter season is the best in the Alps; spring is the time of general melting of the snow, and soil and air are damper than in winter, so there is more risk of chills and possibly of microbic infection than in winter, but this risk is not greater than in lower regions, where the air at the same time is more relaxing. The descent to lower regions ought therefore not to be the rule, as it is at present, but the exception, and this only after careful consideration, and with all due precautions as to travelling, selection of locality, rooms, &c. In summer it is desirable to select mountain places which are rich in pine forests, in order to have shade from the sun and the additional benefit of the exhalation of the pines. The first part of autumn is very good, while the second forms a transition stage to winter, and is often unfriendly. Where it can be arranged, the stay in the European Alps ought to commence in August or the beginning of September, in order that the acclimatisation can take place before the changeable transition stage begins.

You will ask me which elevation is required to bestow on a locality the character of a mountain climate. This varies greatly according to the degree of latitude, distance from the sea, and other circumstances on which I cannot enter at present. The character of the vegetation is to some degree a good criterion. In the flat regions of Northern Germany an elevation of 1500 feet is sufficient to produce a vegetation which somewhat resembles that of the Swiss Alps at an elevation of nearly 5000 feet, and of the Peruvian Andes at 10,000 or 11,000. The isothermal lines are likewise a help in this question. We may perhaps say, but only roughly, that in Europe north of 50° an elevation of about 1600 feet has already some characteristics of mountain climates; while between 50° and 48° latitude about 1700 feet to 2500 feet are required; and between 47° and 46° latitude from 3000 to 5000 feet. I need, however, scarcely tell you that I think all the climatic characters of a mountainous region in North Germany or Northern France at an elevation of 1600 to 2000 feet are the same as those of 5000 or 6000 feet in the Swiss Alps. The average air temperatures may be similar, and also the time during which the ground is covered with snow, but the rarefaction of the air must be less great at the lower elevations. The air is heavier, the light and sun-heat are less intense, and the moisture is mostly greater. About the microbes I am not yet sure; their distribution is likely to be unequal; but where there are only few human habitations, and few sources of organic decay and putrefaction, where the soil is dry and especially where it consists of granite and gneiss, with absence of stagnating water, there the microbe element will probably be scantily represented.

From what I have said you will expect me to recommend altitude climates in hereditary and acquired tendency to phthisis, and especially in cases with imperfect expansion of the thorax and the so-called "phthisical habitus"; and further, in all conditions comprised by the term phthisis, excepting those which I must describe as non-suitable—viz., (1) consumptive patients, who belong to what I have termed the erethic constitution, whether the affection is early or advanced; (2) phthisis in a very advanced stage; (3) phthisis complicated with emphysema; (4) phthisis complicated with albuminuria; (5) phthisis complicated with disease of the heart; (6) phthisis with ulceration of the larynx; (7) phthisis with rapid progress and constant pyrexia; (8) phthisis with great loss of substance; (9) phthisis with considerable empyema; (10) phthisis in persons who cannot sleep or eat in high elevations, or who feel constantly cold. Some of the conditions are not permanent, but only temporary and removable obstacles. Tendency to hæmoptysis was formerly regarded as forbidding mountain climates, but experience has shown that this is incorrect; that, in fact, hæmoptysis occurs much less frequently in high than in low regions, and is often prevented and checked by a stay in high regions (Archibald Smith, Brehmer, Spengler, Unger, Dettweiler, C. T. Williams, Denison, Solly, Ruedi, Peters, and Hermann Weber).

After having discussed the general characters and influence of the climates of elevated regions, I must limit myself to a few remarks only on the principal health resorts, as time compels me to do so; and as there already exist numerous descriptions in the English language by professional and non-professional authors, I need not tell you that the difference between the different localities included in this class of climates is very great, and is only yet partially known and appreciated; that even in the same Alpine valley, and in the same place, there are great differences between different situations, and that the climate of the same place is by no means uniform in different years.

We naturally begin with the Swiss Alps, as they are nearest to us, and with Davos Platz about 5100 feet above the sea level, as it was the first place resorted to just twenty years ago, when two patients migrated there from Gorbesdorf, Dr. Unger and Mr. Richter, who there regained their health and are still living at Davos in active occupation. They were encouraged to give a prolonged trial to the place by Dr. Spengler, who had already written on the absence of scrofula and phthisis in the Davos Valley. As I had been on the look-out for a suitable place in the Alps for some years previously, in consequence of some encouraging experiences which, I might say, accident had thrown in my way, I soon afterwards began to send patients there. When I first directed attention to Davos Platz in 1867 it was still a charming primitive Swiss village; now numerous large and small hotels and villas stretch along the high road for more than a mile, and Davos Dörfli, a little higher up in the valley, may almost be considered as a suburb of Davos Platz. Waters, Spengler, Frankland, Unger, Clifford Allbutt, Addington Symonds, C. T. Williams, Burney Yeo, Peters, Marcet, Otter, Jaccoud, Sée, Symes Thompson, and others have amply described the peculiarities of Davos. The presence of good physicians, the more and more improving arrangements in the hotels, including sunny terraces and verandahs, the means of varied exercise and amusement, the comparative nearness to the railway, a good road thence (from Landquart or Chur) to Davos without an intervening high pass, are accessory, though very important, to the general climatic characters of Davos Platz and Dörfli. A drawback is that its reputation has of late years increased so rapidly that too many, frequently ill-suited, cases are sent to Davos; that the number and size of the hotels and health establishments increase at an alarming rate, so that there is actual danger that Davos may be ruined by its own original advantages; *for purity or aseptic quality of the air is incompatible with the crowding together of a large number of invalids.* Mr. J. Addington Symonds, the author of "Davos in Winter," has written on this subject in the *Pall Mall Gazette* of Jan. 14th, 1882; and I have likewise already mentioned this matter in a paper on Climate and Health-resorts in the "Book of Health." If Davos were to be ruined, the calamity would not be confined to the inhabitants of the valley, but would be shared by many invalids all over Europe.

Lower down in the Davos Valley, at Davos Frauenkirch, a small hotel offers fair accommodation to a limited number of invalids; and further down, but high above the bottom of the valley of the Landwasser on the sunny southern slope of the Rothornstock, lies Wiesen, of about 4770 feet of which Dr. Tucker Wise has given an attractive description. It is well sheltered from N. and N.E., but is rather more exposed to S.W. wind than Davos, and the snow does not lie quite so long. The hotels and the social attractions are not so advanced as those at Davos, but the stay is less expensive

and under the guidance of Dr. Buol, an intelligent Swiss doctor, who is a licentiate of the London College of Physicians, results can be obtained in suitable cases, even with limited arrangements.

The Upper Engadine is a fair rival to the valley of Davos, and the village of St. Moritz, about 6000 feet above sea level and 280 feet above the lake, with the well-known Kulm Hotel and the houses of Kaspar Badrutt, represents the Davos Platz of the neighbouring valley. St. Moritz has been so well described by Dr. Burney Yeo, Mr. Lionel Tollemache, Drs. Ludwig, Biermann, and many others, that I must confine myself to a very few remarks. Davos is somewhat more sheltered and is slightly warmer than St. Moritz, and is nearer to the last railway station for those coming direct from England or the North. St. Moritz lies 900 feet higher, has the advantage of the snow somewhat longer, has decidedly more wind according to the observations of Mr. Waters, has a skating rink and a good lawn tenis court in the immediate neighbourhood of the hotel, and more opportunities for exercise. On the whole, Davos has some advantages for more serious invalids; St. Moritz for hardier cases. The best sites in the Upper Engadine would probably be found in the neighbourhood of Pontresina on the south western slopes of the Muraigl on the Munt Della Bescha; they would have the largest share of sunshine during the shortest days of the winter, would be in the immediate neighbourhood of pine and larch forests, and out of the way of the Maloija wind; but the hotel proprietors of Pontresina are as yet hostile to the scheme of a winter cure, fearing that their summer guests would leave them if they were to open that favourite spot for the treatment of phthisis. They are apparently strong contagionists. But there are sites, for instance, near Acla, about 6000 feet above sea level, to the right of the road from Pontresina to Samaden, over a mile from the former, where one or two health establishments might be placed without prejudice to the visitors of Pontresina.

Samaden has been for many years used by some consumptive patients as a winter resort, and the excellent fare and service at the Hotel Bernina make to some degree good what the absence of open and covered verandahs and balconies and terraces leave to be desired. Above Silvaplana and Campfer, on the southern slopes of the Piz d'Albana and Piz Valaschin, good sites could be found. The establishment of the Kursaal Maloja is rather exposed to wind, and not high enough above the upper end of the Lake of Sils to be perfectly free from damp and mist at all times of the year; but the Kursaal itself is dry, and the large corridors for indoor exercise, the arrangements for constant and abundant supply of warmed air to the rooms and passages, and the good cuisine make atonement for some defects in the position. Dr. Tucker Wise, who is the resident medical officer, has given an encouraging description of these arrangements; and such improvements as sheltered out-door seats and pavilions were in the course of erection when I was there on a visit during the autumn of 1884. Independently of permanent residence the Maloja Hotel can do good service as a place of transition—for instance, during the melting of the snow when out-door exercise is difficult. A few weeks at this place will occasionally be an advantage to visitors at St. Moritz or even Davos, as they can walk for hours every day in the well-aired corridors without exposure to draught or dampness. The localities mentioned, and Zuz in the Upper Engadine, are all the winter health-resorts in the High Alps which are open to us at present. There would be some satisfactory places in the Dolomites, as above Cortina, and perhaps San Martino di Castrozza and Campiglio, but there are no arrangements for the winter as yet.

In a much lower situation is St. Beatenberg, above Lake Thun (3766 feet), quite sheltered from the north and east, quite open to the south, and very sunny. It is only lately that the proprietors of the Kurhaus have commenced to keep the hotel open, and I cannot therefore speak of the results. The Hotel des Avants (3212 feet above sea level, and 2000 feet above the Lake of Geneva) has a very sunny situation, and is already out of the region of mists in winter. The arrangements of the hotel are good, but the snow does not lie so long as at Davos and St. Moritz; and although preferable in many ways to the lower localities on the lake, it is not as bracing as the health resorts in the Grisons. Seewis, (2986 feet), above the road from Landquart to Davos, has a cheerful sunny and sheltered situation. Such localities will probably, by degrees, take an important place as *intermediate health resorts* for intermediate cases; for such, to use an instance in which the usefulness of higher localities is doubtful, or in which they are certain to be unsuitable, where, however, a surrender to the low level places is undesirable; or as temporary places—viz., as steps to or from the higher health resorts. Seewis, for instance, is well adapted as a stepping-stone to Davos and St. Moritz. In order, however, to become really useful, they must, as Seewis has done, provide themselves with good resident medical men, as without this it would be wrong to entrust to them cases requiring special care.

I must now name two localities in Germany which deserve your attention, although I can mention them only in a cursory manner: these are Görbesdorf in Silesia, and Falkenstein in the Taunus. Görbesdorf, about 1740 feet above the sea level, is the cradle of the mountain health resorts, and of the hardening open-air treatment in Europe, with a judicious admixture of hydro-therapeutics. Dr. Hermann Brehmer has the merit of having introduced this combination in a systematic manner, coupled with the strict supervision of the patients, essential in the hygienic as well as therapeutic management. Brehmer's establishment lies in a beautiful park, with a pine-clad hill belonging to it, arranged for graduated climbing. The establishment is provided with covered walks of great length, and with a winter garden, suitably warmed and ventilated. Falkenstein, about 1500 feet above the sea level, has become, under the judicious as well as energetic guidance of Dr. Dettweiler, a health resort where not only many invalids have been improved and cured, but where they have learned how to manage themselves afterwards. The results obtained at this establishment show how much can be done in phthisis by carefully arranged hygienic management, even with imperfect climatic elements.

During the last few years several other establishments have been formed which are likely to become useful, and to lead to further imitation. Aussee, in Styria (2150 feet), St. Blasien (2500 feet), in the Black Forest, Reiboldsgrün (2257 feet), in the midst of a forest near the railway station of Auerbach, in Saxony, and Badenweiler (1380 feet), in a beautiful position on the south-western slopes of the Black Forest, deserve to be specially mentioned.

In Norway the Gausdal sanatorium, about 3000 feet above sea level and 2500 feet above Lake Mjosen, and twenty-four miles from Lillehammer, has been mentioned to me as a probable health resort for consumptives.

More important to us in the treatment of phthisis are the health resorts of America. In the Peruvian Andes and the Rocky Mountains of the United States they possess indeed an endless variety of mountain climates. Near the equator, elevations of 6000 and 8000 feet have winter temperatures similar to our summer temperatures, and we must go still higher to find localities suitable to the treatment of phthisis. But at greater distances from the equator we come at elevations of about 6000 or 7000 feet, to climates somewhat similar to those in the Alps at about 5000 to 6000 feet. In the neighbourhood of Jauja and Huancayo, at elevations varying from 8500 to 10,500 feet, several of my patients have recovered from rather advanced affections of phthisis, after I had learned the character of these climates, and had been encouraged in sending patients there by my late friend, Dr. Archibald Smith of Lima, whose papers on these subjects are well known to you. How different, however, these climates are from the Swiss Alps, you may see from the following statement of Archibald Smith:—"At Huancayo, 12° south latitude and 75° 12' west longitude, the annual range of temperature in the shade may be taken as ranging from 8° or 9° to 14° R.; while at the cooler town of Jauja, with from 10,000 to 15,000 inhabitants, the range during one whole year has been observed not to exceed from 8° to 12° R., or from 50° to 59° or 60° F., with the sky always clear and sunny, and an atmosphere pure and bracing, which invites to outdoor exercise and enjoyment." From no other localities have I seen such good results as from Jauja; but also from Santa Fe de Bogota (about 10,000 feet), Quito (about 10,000 feet), La Paz (12,000 feet), and Cuzco (11,250 feet), I have occasionally received good reports. Areguipa, in Peru, 16° south latitude, has lately been recommended by Dr. Dixon Hunter, with an equable temperature, averaging about 65° summer and winter within the house and outside in the shade during the day. I have no doubt that this climate is infinitely better than many others, especially the hotter regions along the sea-shore, and that consumption can be cured there; but it is somewhat too warm.

The Rocky Mountains in the United States of America have only been used as health resorts in phthisis, so far as I

know, during the last fifteen or sixteen years, and they seem to have met likewise at first with much opposition; at all events, during the last ten years the advice I have given to several American consumptive patients to settle at Denver or Colorado has been rather severely criticised by New York and Philadelphia doctors, especially in two cases of hæmoptic tendency, and yet these patients did well when they afterwards carried out the advice. Manitou springs (6315 ft.), Colorado springs (5775 ft.), and Denver (about 5000 ft.) are the best known localities, and have been repeatedly described by Drs. Denison and Solly; but numerous other resorts of the future are mentioned in Dr. Denison's instructive work on "The Rocky Mountains Health Resorts." Dr. Frankland has quite lately mentioned to me in this territory a locality which is likely to become an important health resort—Yellowstone National Park, accessible by the Northern Pacific Railway. It is situated on the eastern slopes of the Rocky Mountains, between 44° and 45° N. lat. "The park abounds in magnificent geyzers and boiling springs on a most gigantic scale, and there are plenty of mineral waters. The boiling water and steam might be made available for warming hotels, but there is also an abundance of wood fuel. There is so much room in Yellowstone that there need be no overcrowding, as at Davos."

Mexico, too, possesses good health-resorts, especially the town of Mexico and Puebla, about which the well-known works of Jourdanet and Guilbert contain valuable information.

The South African altitudes have been described by Symes Thompson and the late Harry Leech and by several non-professional writers—Trollope, E. F. Sandeman, and Otter. The most important health-resorts are contained in the Orange Free States, Griqualand West, and the Transvaal. Bloemfontein (4700 feet) is the best known place; but among others equally suitable are Christiania, Bloemshoff, Potchefstroom, Witwater Rand, Pretoria, Heidelberg, Utrecht, Standerton, and Wakkerstroom. Everywhere the climate is dry, and often in summer very hot, and in winter cold. I have seen some good from these localities, but the promise of "the absolutely perfect cure" held out many years ago by some inhabitants of the Free States has not been fulfilled. Whenever we recommend these regions we must bear in mind that a sea voyage and a long land journey are implied. Those who are good sailors will not regret the former, and the latter can be rendered beneficial if the invalid is not too weak and does not mind expense. The best mode to reach the high regions is still a well-supplied ox waggon from Graham's Town or Wynberg. "Waggon travelling with the traveller's own oxen," Mr. Otter justly says, "is very slow work, not averaging more than ten to twelve miles a day, but as such an expedition is only made for the sake of health, the rate of travelling is not material, and when once a traveller has got into a district which is suitable to him he is in no hurry to get out of it."

Many of the great mountain chains of Asia contain, no doubt, useful health resorts, but our dependable knowledge is almost confined to the Himalayas, which enclose, you may say, all varieties of climate, stretching along as they do for about 2000 miles, with an average width of 180 miles and elevations ranging from 1000 to 23,000. There are, besides, the Neilgherry range, the Pulneys, the Aravulli or Aravelli Mountains, the Vindhya range, the Western and Eastern Ghauts, and several other ranges. There are health resorts varying from 4000 to 8000 feet elevations. In considering these stations we must always bear in mind the nearness to the equator, and, further, that the peninsula is surrounded, excepting its broad base, by enormous masses of warm water. The periodical winds coming from these seas are saturated with vapour, which on reaching the cooler mountain ranges is partly deposited as rain. The emanations from the damp soil are probably laden with microbic life. The majority of the Indian Hill stations have therefore very different climatic conditions from those of the Peruvian Andes, the Rocky Mountains, and Swiss Alps. These circumstances may explain the contradictory views of Anglo-Indian medical men regarding the influence of their hill stations on phthisis. The carefully drawn up report, however, of Dr. Kellett on consumptive soldiers, who spent six months (April to November) at the convalescent station of Landour, shows results which are not unsatisfactory. Very different must be the climates on the northern slopes of the Himalayas, for the atmosphere before reaching them has lost the greater part of its moisture; on the southern slopes and highest ridges the climates must be drier and cooler, and very possibly Thibet (9000-11,000 feet) and Cashmere (5000-6000 feet) contain most healthy climates.

I had intended to survey with you, gentlemen, the climates of Nubia and Egypt, of Algiers, Italy, Spain, the Riviera, and south-west of France, of Australia, New Zealand, Madeira, Teneriffe, and the high seas, in their applicability to the treatment of phthisis; but time fails, and I hope you will pardon me for having spent so much time over other matters, and that you will not think I regard the regions which I pass over as useless. They have been so often and so well described by others as well as elsewhere by me, that my present omission can scarcely be regretted. Many of the localities included in these climates possess very useful qualities for the treatment of phthisis, and especially for those conditions and constitutions which are either temporarily or permanently debarred from the benefits of the altitude climates; but I regret to say that as yet the arrangements are nowhere perfectly satisfactory, even at the most favourite places, supplied with all the modern comforts, such as Cannes, Mentone, and San Remo; the majority of invalids are in the habit of acting almost independently of their medical advisers, and many perish who under strict guidance might have been saved. The personal character and professional superiority of a Dr. Frank, a Bright, a Charles, a Siordet, or of one of the other physicians practising there, may in some, even in many, cases exercise so powerful an influence as to command a willing obedience; but the whole system of this looseness of tie between doctor and consumptive patient is deplorable, and the results obtained are very inferior to those which might be obtained by judiciously arranged health establishments, under strict medical guidance in every point of general and personal hygiene. This, however, is by many invalids not yet regarded as the principal sphere of the physician's work, but more or less as everybody's business, for which no doctor is required, and which each individual must find out for himself.

I also regret very much that I cannot properly discuss the climates of Great Britain and Ireland. These islands contain on their different coasts and in their interior a great variety of climates, which have been well described by Sir J. Clark, Thorowgood, C. T. Williams, Tripe, Buchan, and others, and I have likewise given short sketches of them. With all the differences, great as they are, between the east and west, south-east and south-west coasts and the different inland localities, there are certain traits of character more or less common to all of them—viz., a high degree of humidity; greater warmth than is due to the geographical latitude; comparative equability with regard to seasons and periods of the day; an analogous degree of sunlessness and dulness of atmosphere; and considerable movement of the air, almost amounting to windiness. All these localities as a set-off possess hygienic arrangements which are superior to anything which is to be met with abroad, good food, and good accommodation; they are of easy access, and do not require a complete separation of the invalid from his family. The physiological influence on the constitution compared with foreign localities of a similar elevation may be designated as more or less tonic and health-giving, though not exhilarating, and as requiring a certain degree of energy and integrity of constitution. We possess in these islands good climates for preventive treatment; but we are not so well provided with localities assisting the treatment of developed phthisis, where the lungs and the constitution have partially lost their integrity and energy. We ought therefore to do everything to mend the defects of these our climates, and to render the good qualities available, and concentrate them if possible. Is this done at our health resorts for the treatment of phthisis? No, gentlemen, there are no such arrangements, or almost none, on the coasts of Devonshire, Hants, Sussex, and even the Isle of Wight, excepting the few sanatoria. Let us use our influence with our local professional brethren, who are neither deficient in knowledge nor in insight, and with the local proprietors and public, to obtain well-placed and well-arranged houses for the invalids, with suitable balconies on which light couches and shelters for open-air treatment can be placed, good large verandahs with movable glass doors; open and covered walks and winter gardens for exercise in windy and rainy weather; seats of different nature with turnable shelter; quadripartite glass-covered seats, like those at Hastings and St. Leonards, for which these places deserve commendation; walls for shelter from wind, and for reflec-

tion of the sun when it shines. We must induce our patients to place themselves under the entire control of their local doctors during their whole stay at one of our health resorts, and to learn that the guidance of the doctor is as important as the climate, and in many cases more so. By judicious management the doctor is often able to counteract the disadvantages of an indifferent climate and to bring into action all its good points, while without the guidance of an intelligent physician the natural and social attractions associated with a satisfactory climate may become sources of failure. There is no doubt in my mind that it would be a very great advantage to many invalids, especially those who are not very rich, if there were well-arranged health establishments under the supervision of good medical men, and that through them better results could be obtained from our home climates.

And once more, gentlemen, let me plead for the multiplication of small hospitals in good situations for the consumptive poor, such as I have sketched in the second lecture. You have always treated me with so much kindness and consideration since you have, so to say, adopted me as one of yourselves, that I am hopeful you will give your countenance to the plans I have suggested, and that through you they may lead to some good; then, gentlemen, the recollection of the hours which I have had the pleasure of spending with you in these lectures will belong to the brightest of my life.

CASE OF

BULLET WOUND (PENETRATING) OF THE ABDOMEN, WITH NUMEROUS PERFORATIONS OF THE INTESTINES, TREATED BY ABDOMINAL SECTION.

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A NOTE of the following case will, I trust, be considered of general interest, and also of special interest in connexion with the recent discussion at the Royal Medical and Chirurgical Society.

T. R——, aged fifteen, was admitted to the Edinburgh Royal Infirmary, under my care, on the 9th of March of this year. One hour before admission he was standing in front of a companion at a distance of about two feet, when a loaded revolver which was in his companion's hand was accidentally discharged, and the bullet struck him in the abdomen. The patient did not fall, but, placing his hand on his abdomen, he walked about a hundred yards into the nearest house, where he was carefully attended to, made to lie down, and a temporary dressing applied over the wound. He was then conveyed to the infirmary, where he was at once seen by me. On inquiry it was ascertained that the bullet was conical in shape, a quarter of an inch in diameter at its base, and a little more than half an inch in length.

On admission there was slight general shock, and the patient complained of a little pain in the region of the abdomen and pelvis; but he was perfectly sensible, and gave an intelligent account of the accident. The clothes had been slightly disarranged in applying the dressing, but on examination there was seen to be a round hole in the double fold of the trousers in front, a similar hole through the flannel drawers, three distinct holes in the flannel shirt, which was in folds at this point, and, lastly, an opening in the flannel jacket worn next the skin. The textures for a short distance round the holes in the clothes were scorched. The temporary dressing having been removed, there was found a rounded opening in the abdominal wall, with ragged and scorched edges. The position of the wound was an inch and a half below and half an inch to the left of the umbilicus, its diameter being rather more than a quarter of an inch. A probe was carefully introduced into this wound, but, as its point became obstructed in the substance of the left rectus muscle, it was not further employed.

Operation.—Chloroform having been administered, an incision an inch and a half in length was made in a longitudinal direction, the bullet wound being included in its centre. The various tissues of the abdominal wall were carefully incised until the peritoneum was reached, when a narrow slit was seen in the latter membrane, and protruding through it there was a small piece of bruised omentum. This portion of omentum having been carefully pushed aside, a small knuckle of uninjured small intestine presented itself. The peritoneal wound having been slightly enlarged, another knuckle of small intestine with three distinct perforations in it at once protruded. Two of these openings were situated within a quarter of an inch of each other, the third at a distance of about an inch and a half from the others, on a different aspect of the gut. These three openings were stitched by means of a continuous suture of fine catgut after Lempert's method. Both the external and peritoneal wounds were now enlarged upwards and downwards, so as to allow a more complete search of the abdominal contents. When this was done a considerable amount of blood oozed up from the deeper part of the abdominal cavity, and on drawing aside some folds of intestine this hæmorrhage was seen to come from a large vein in the mesentery, which had been perforated by the bullet; this vein was seized and ligatured with catgut. A further examination of the intestines showed two more perforations in the small intestine—two in the descending colon, and two in the pelvic portion of the rectum; all these were sutured with catgut, as in the case of the first three wounds. A careful search did not discover the bullet, and no injury to the bones of the pelvis or to the vertebræ could be found. No extravasation of fæcal matter was observed, but there were several large clots of blood lying in the pelvis. During the operation the exposed intestines were carefully protected by towels soaked in a warm solution of corrosive sublimate (1 in 2000), and the whole cavity of the abdomen and pelvis having been sponged out with the same solution, the external wound was closed by means of deep and superficial sutures. After the operation the patient's pulse and strength were good, and a half-grain morphia suppository was introduced. In the evening the patient expressed himself as feeling comfortable, and his pulse remained good. Early on the following morning he became restless, complained of pain in the abdomen, and showed symptoms of exhaustion. He did not rally from this, but died about 12 o'clock, twenty-four hours after the accident.

Necropsy.—On opening the abdomen the intestines were seen to be much distended with gas, and the abdominal cavity contained about six ounces of brick-red serum. The first three wounds in the small intestine were situated about three feet and a quarter below the duodenum, and the other two wounds about two feet two inches below this point. The other wounds, as mentioned, were situated in the colon and pelvic part of the rectum. On passing a powerful stream of water through the intestines, they were found to be perfectly watertight, except that there was a slight leakage where the three intestinal perforations were situated close together. After considerable search the bullet was found lying on the right side of the pelvis immediately in front of the ischial spine. There was no injury to the bones or other structures.

Remarks.—This case is an interesting example of the deviation of a bullet, which, having entered the abdomen a little to the left of the middle line, perforated the small intestine, the descending colon, and the rectum, and, passing across, lodged low down in the right side of the pelvis. In order to diagnose the exact nature of the wound in this case, the principle of carefully incising the abdominal wall so as not to divide the peritoneum in the first instance was carried out, the bullet wound being kept in the centre of the incision as a guide. The gentle use of the probe gave no satisfactory result, except to prove that the bullet had passed into or through the rectus muscle. Had the wound been a non-penetrating one, my incision would have been attended with little risk, and it would in all probability have allowed the bullet to be detected and removed if it had lodged in the abdominal wall or any other accessible place. Although this case terminated fatally, the result of the operation, as proved by the post-mortem examination, is, I think, encouraging, and should another case of this kind come under my observation I would not hesitate to carry out the same principles of treatment. The very important and suggestive papers published in 1882 by the late Dr. Marion Sims, and the experiences and suggestions of distinguished American and other surgeons as the result of their large experience in military practice, form material and considerations worthy of the careful attention of all practical surgeons; and a study of them and of other facts in connexion with abdominal surgery, together with a

knowledge of the fatality of these injuries, had prepared me to carry out active interference should a suitable case present itself. The complete staying of the hæmorrhage from the wounded mesenteric vein was an important result of the operation, and the entire absence of fæcal extravasation was also a most satisfactory point. The slight leakage which took place when a stream of water was passed with some force through the intestinal canal after death would not, I think, have led to any injurious effects during life. It can be readily understood that it was difficult, if not impossible, to ensure a perfectly aseptic condition in such a case; and I am inclined to think that drainage of the abdominal cavity would be advisable under similar circumstances. I did not employ drainage in my case because the abdominal cavity after the operation appeared to be perfectly free from blood-clots and fæcal or other extravasation; and I had hoped that the free use of the corrosive sublimate solution would have counteracted any septic mischief.

Edinburgh.

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.

BY GEORGE OLIVER, M.D. LOND.

No. I.—THE TESTS FOR THE BILE SALTS, WITH DEMONSTRATION.

(*Concluded from page 701.*)

The peptone test solution.—Having got out the fact that bile salts when present in the urine precipitate a proteid from an acid solution, it was an easy matter to discover how to apply it as a practical test. On substituting for the acidified albuminous urine an acidulated antiseptic solution of peptone, I obtained a test solution much better in all respects, being readier and more delicate, and withal a preparation devoid of all objectionable qualities.[1]

The reaction.—When twenty minims of urine, containing bile salts in pathological quantity, are run into sixty minims of the test solution, an opalescence appears proportionate to the amount of the bile derivative. [Experiments shown.] It differs from all other urinary precipitates induced by an acidified reagent, in dissolving up completely on adding a drop or two of acetic acid or a citric test-paper;[2] and in diminishing, but not disappearing, on boiling.[3] The opacity is not affected by such warmth as suffices for the solution of urates, or even by a higher temperature than this implies. You observe that when the test solution is run upon urines containing an excess of bile salts, an immediate and very distinctive reaction takes place where the fluids meet—namely, a sharply defined white band of precipitated peptone; and on oscillating the tube, so as to mix up a little of the urine with the test solution, the upper part of the column presents an opacity, the density of which is proportionate to the amount of the bile derivative present, in marked contrast with the transparency of the urine below. On further agitation, a limit is reached when the opalescence diminishes, and perhaps finally vanishes; then it is restored on adding more of the test solution.

Delicacy of the test: objections.—The test is undoubtedly a very delicate one, for I have readily determined by it the presence of one part of bile salts in at least from 18,000 to 20,000 parts of a solution of chloride of sodium. The question will naturally be asked, Is there anything besides bile salts in the urine that will react in like manner with an acidified solution of peptone? So far I have failed to put my finger on any such constituent; and I have tried several, among them kreatin, kreatinin, leucin, tyrosin, hippuric acid, and fatty acids (monatomic and diatomic).[4] Besides this failure to discover in the urine a non-biliary substance that can precipitate the peptone, all the positive evidence hitherto obtained undoubtedly supports the position that it is a liver-derived product present in the urine which reacts with the test. The testimony of the facts is cogent in this direction. (*a*) The biliary salts extracted from the bile produce an identical reaction. (*b*) The liver is the sole organ that furnishes a secretion which precipitates a proteid from an acid solution. All the secretions except bile either do not act on the proteids at all, such as saliva, or they dissolve them, such as the gastric and pancreatic juices; and, furthermore, the biliary salts are the only constituents of the bile that possess the property of throwing a proteid out of solution. (*c*) Then I must refer you to the physiological and clinical data which I hope to bring forward in my next communication. These definitely show the connexion that subsists between the proportions of the substance which the peptone test detects in the urine, and the varying degrees of activity of the liver, as well as the diseases and disorders of this organ. I have checked mucin and urates—the fallacies to which all acid urinary tests are liable. The *mucin* of urine of normal reaction is in acid solution. I have elsewhere[5] shown that when this albuminoid body is thus dissolved it is not precipitated by the addition of further acid. So that when this constituent is thrown down in urine of acid reaction, it seems highly probable that the acid added is not the reagent, but merely supplies the requisite degree of acidity to enable the precipitant already present to operate—as in the case of the bile salts and albumen. If so, a mucin precipitate merely indicates the presence of bile salts. Furthermore, on running the test solution on the muciparous mixture of normal urine and clear saliva, the reaction is rather diminished than intensified, and it is *nil* when a solution of chloride of sodium is substituted for the urine. Then, again, the methods of observation requiring a uniform low specific gravity obviate a liability to error from this cause.

Urates.—Inasmuch as the modes of testing—both qualitative and quantitative—require the uniform dilution of the urines to the specific gravity of 1008, a condition is provided which secures the solution rather than the deposition of urates; so that all observations may be trusted without the necessity of resorting to warmth as a corrective. Even when testing the urine undiluted, I have not once observed a precipitation of urates.

The mode of preliminary testing.—In every case the urine to be tested must be quite clear. If turbid from urates, it should be clarified by warmth; if from phosphates, very small pieces of citric test-paper should be added and shaken up with the urine until it becomes transparent, special care being taken not to acidify beyond this limit. It is, upon the whole, best to filter turbid urines; and this proceeding is necessary if the cause of the opacity is organic or doubtful. When the urine is cloudy from blood, it should first be boiled[6] and then filtered, for filtering alone does not clarify it. The specific gravity of the urine is to be reduced to 1008.[7] The object of this direction is to obviate fallacious inferences apt to be drawn from reactions with urines of varying densities: concentrated urines often reacting as if there were present an excess of bile salts; and urines of low specific gravity, though sometimes affording a reaction similar to that of normal samples, actually containing an increased proportion. Twenty minims of urine are added to sixty minims of the solution. If the bile salts are present in excess a distinct milkiness appears, which develops somewhat further in the course of a minute or so; and the depth of the opacity is proportionate to the amount of the bile

[1] The following is the formula for the solution:—Pulverized peptone (Savory and Moore), thirty grains; salicylic acid, four grains; acetic acid (B.P.), thirty minims; distilled water, eight ounces. Perfect transparency is obtained after repeated filtration.

[2] When, after dropping in the test-paper, the tube is set aside for a minute or two without shaking, the observer will find the portion below quite transparent, and that above still opaque; and on shaking up the contents he will disperse the opalescence throughout.

[3] When the test solution is precipitated by bile salts, the precipitate has the same peculiarities; dissolving when further acidified, and lessening—certainly not vanishing—when boiled.

[4] It is well known that a concentrated solution of chloride of sodium in the presence of an acid will precipitate a proteid. When the chlorides of the urine appear in excess, will they react with the test solution? Experiment shows that when the peptone solution is run upon a solution of salt of any specific gravity less than 1050 no precipitation whatever appears. Therefore the urinary chlorides are not a source of error, and more especially when it is called to mind that a condition of the testing is the reduction of all urines to the uniform specific gravity of 1008.

[5] Bedside Urine-testing. 3rd edition, pp. 110-11.

[6] Boiling the urine does not destroy the bile salts. It is true, if any taurocholate of sodium is present it is broken up, the products being taurin and cholate of sodium; but the peptone test reacts with the cholate as well as with the liver-secreted salt.

[7] This is done very readily by taking the specific gravity of the urine according to the method I follow (see Bedside Urine-testing), a bead of the specific gravity of 1008 being dropped into a measured portion of the urine contained in the tube graduated from 1008 to 1018, and water being added until the bead ceases to rise and remains stationary at any part of the column of fluid.

derivatives. If the urine contains the average proportion found in the majority of healthy urines—or, of course, less than that proportion—the reaction is a mere tinge of milkiness, which is, moreover, not immediate.

The contact method.—When the test solution is gently run over a urine (reduced to the specific gravity of 1008) containing bile salts in pathological amount, an immediate reaction takes place; but when the quantity is normal or subnormal, the reaction is not instantaneous—it gradually appears in the course of a minute as a delicate thread-like line, which may undergo a little further development during the lapse of a few minutes.

Quantitative estimation.—Clinical observation demands something more definitely comparable than can be derived from the mere qualitative testing; for it should decide as accurately as possible the quantitative variations of the urinary elimination of the bile salts observable in different pathological conditions, in the various stages of disease, and in the effects of treatment. I have therefore devised the following procedure to meet this requirement. A permanent standard of opacity is needed to represent the small average discharge of bile salts in healthy urine. For this purpose I have selected alumina precipitated by ammonia, because the permanency of this form of opacity has been proved by the alumina standard, which over twelve months ago I devised for quantitative albumen. The opacity of the fluid contained in this small tube is that provided by mixing together in equal proportion (sixty minims) the urine, reduced to the specific gravity of 1008, and the test solution. To sixty minims of the test solution the urine, of the specific gravity of 1008, is added, in ordinary cases ten or twenty minims at a time, and allowing a minute to elapse after each addition, until the opacity induced is seen to be exactly equal to or to slightly overstep that of the standard, the tubes being held to the light, *shaded by a dark background*, such as that of the coat-sleeve. If fifty or sixty minims of the urine bring up the opacity merely to that of the standard, the proportion of bile salts is not outside the normal range in the direction of increase. But any smaller quantity of urine required indicates an excess of the biliary derivatives over the physiological variations. The smaller the amount of urine needed, the larger the proportion of bile salts present, according to the following table:—

Urine.				Percentage increase of bile-salts over the normal maximum.
Minims.		Drops.		
1	or	2	=	3000
2	,,	4	=	1500
3	,,	6	=	1000
4	,,	8	=	750
5	,,	10	=	600
10	,,	20	=	300
15	,,	30	=	200
20	,,	40	=	150
25	,,	50	=	120
30	,,	60	=	100
35	,,	70	=	83
40	,,	80	=	66
45	,,	90	=	50

Charges of bile-salts beyond 700 per cent. increase over the normal maximum amount are only met with now and then; but they may be encountered in isolated samples of even non-jaundiced urine; as in a specimen I show you which I lately met with containing 1500 per cent. increase of biliary salts, but quite free from bile pigment.[8]

The peptone test-paper.[9]—I have arranged the peptone test in the form of test-paper, so as to serve the convenience of observers in the preliminary testing. The test-paper is permanent and reliable, and is best used in the following manner: The peptone test-paper along with half a citric paper is dropped into fifty or sixty minims of water in the larger test-tube or a wine-glass; after the lapse of a minute or so the solution is slightly agitated, and on being set aside for another minute[10] is ready for use. The solution thus prepared is taken up by the pipette and carefully run over the transparent urine, when, if bile salts are present in larger amount than the normal average, an immediate reaction is observed, as a pearly-white thread or band; but, with urine devoid of this excess, a delicate zone may appear, but only in the course of from one to two minutes. The test may likewise be employed equally well in the following ready way: The test-paper along with half a citric paper is dropped into sixty minims of water, and twenty minims of urine reduced to the specific gravity of 1008 are added. The contents of the tube are oscillated for half a minute, and then set aside for a minute, so as to allow time for the clearing away of gaseous particles and the development of the reaction. If bile salts are present in excess a distinct milkiness is apparent, but if in normal or subnormal amount there is only a slight haze, or no obvious change.

[8] Pettenkofer's test afforded at once a beautiful reaction with this sample.

[9] These test-papers, the apparatus for taking the specific gravity, the standard opacity, suitable test-tubes, pipette, &c., as well as the peptone solution, are supplied by Messrs. Wilson and Son, Harrogate.

[10] The solution thus left at rest for a short time becomes quite transparent.

CHRONIC CHOREA OF FORTY-ONE YEARS' DURATION; NERVE-STRETCHING FOR RELIEF OF PAIN.

BY AYMER R. MACDOUGALL, M.B. EDIN., M.R.C.S.

THE LANCET of November 29th and of February 21st publishes papers by Dr. Saundby of Birmingham and Dr. J. C. McLearn, treating of the subject of Chorea in the Aged. While the matter is still fresh in the minds of your readers the following notes of a case of chronic chorea in a person of somewhat advanced years on whom nerve-stretching was performed will, I trust, prove interesting. At the outset I may state that the nerve-stretching was not performed with the primary object of curing the chorea, but was necessitated on account of severe and intractable pain, limited to the regions supplied by the anterior crural nerve. I hoped, however, not only that the pain would be removed, but that a favourable influence, even though slight, might be exerted on the chorea. As the sequel shows, in this I was not disappointed, for, though the chorea still continued, the movements were much less severe than they had been, while the pain itself was completely removed, and remained absent for rather more than two years.

The patient, Mary A——, aged fifty, an inmate of the Border Counties Home for Incurables, had suffered from choreic movements for the last forty-one years. Her family history was good; no evidence of nervous disease in any of the other relatives could be obtained. Up to the age of nine the patient was strong and healthy. At that time she received an injury to the lumbar portion of her spine, followed by partial loss of power in the lower extremities. Shortly afterwards spasmodic involuntary movements commenced in the muscles of the left calf. These, at first slight and localised, gradually became more diffused and severe. The left thigh became affected, then the right lower limb, and subsequently the trunk, arms, and head. This extension occurred very slowly, many years elapsing before the movements became general. During the last two years, even when assisted, she has been quite unable to walk. Prior to this when walking she frequently suffered from retropulsion.

At the time of operation the condition of the patient—a pale, feeble, emaciated woman—was as follows:—Her extremities, head, and trunk were in constant motion, save when she was asleep. Then the movements ceased entirely. The muscles of the face were affected. The arms were less involved than the other parts of the body. She could seize a large object and hold it for a second or two. The tongue could be protruded straight and held out steadily; but so severe were the general movements that the patient was quite unable to rest in bed or to sit on a chair. The only posture in which she could find partial relief was by kneeling on the floor and resting the upper portion of the body on some support. Her sleep was thus much interfered with, and, to add to her misery, a constant shooting pain in the inner and anterior aspects of the right thigh had tormented her for the last three or four months. The muscular power was diminished; her grasp was feeble, but that with the right hand was stronger than with the left. Power in the lower limbs was also markedly impaired. Sensation was everywhere normal save at the inner and anterior aspects of the right thigh, where it was increased. Knee reflex was present on both sides; no ankle clonus. The spine on inspection appeared normal; but, when percussed,

pain was complained of over the seventh and eighth dorsal and also over the lumbar vertebræ; when a hot sponge was passed along the spine she felt it much more keenly at those spots. The action of the bladder and rectum was normal, as were also the special senses. The patient was irritable and childish in manner.

As many local and general remedies had been tried without effect, and as her general health was suffering sadly from the constant pain and want of rest, I offered her the chance of such relief as nerve-stretching, from what I had read of it, seemed to give. This chance she eagerly grasped at, and on March 31st, 1881, assisted by Mr. Page and Dr. Barnes, I stretched the right anterior crural nerve. The incision, an inch and a half long, was made half an inch to the outer side of the femoral vessels. The nerve was easily found, and, having been cleared from the surrounding parts, a blunt hook was gently passed under it. On this the nerve was raised sufficiently to allow of its being grasped between the thumb and forefinger, when it was twice pulled strongly from above downwards and from below upwards. The nerve was then replaced, the wound washed with carbolic lotion, the edges brought together with silver sutures, and a small horsehair drain inserted. When the patient recovered from the anæsthetic, she was absolutely free from pain and from the choreic movements; the latter did not return until the evening, some seven or eight hours after the operation. On subsequent examination, sensation in the parts supplied by the anterior crural nerve was discovered to be almost *nil*, especially as regarded pain. There was no power of flexing the thigh or raising the limb from the bed.

April 1st: The patient had had a good night. Wound dressed, looking well; no pain. The choreic movements are exceedingly slight, those of the right leg not so marked as the left. Had "jumping" in the right limb during the night. Sensation on the right side much the same as yesterday. The right thigh felt somewhat warmer than the left.—2nd: Choreic movements not increased. Sensation and motor power somewhat better. Can feel the prick of a pin when inserted deeply.—4th: Sensation returning much more rapidly than motion. She can feel the touch of a finger placed on the anterior part of the thigh; perception, however, seems somewhat delayed when compared with the left. Pain is distinctly and rapidly felt. She can flex the thigh a very little to-day, but cannot raise the limb from the bed. The right thigh to the touch still feels warmer than the left. Sutures and drain removed. Wound healed, save in the line of the drain.—6th: Sensation seems equal on both sides. No apparent delay in the transmission of impressions. She can now flex the thigh more strongly and rapidly, and can raise it a few inches from the bed. Her general condition has much improved since the operation. She is more cheerful, and eats and sleeps well.—By April 25th the patient was able not only with slight assistance to walk about the ward, but she could sit easily in a chair, which she had not been able to do for many months. There had been absolutely no pain, and the motor power had increased; the right limb, however, was not so strong as the left.

When the patient was examined in February, 1883, nearly two years after the nerve-stretching, the chorea was found to be rather more severe than at the last report, though not nearly so much so as before the operation. She was still able to lie in bed or to sit upon a chair. Power in the right limb was found diminished, both in flexing the thigh and in pushing against obstacles. Her walking was also worse, and more support was required to be given. She had had no return of the pain. Fourteen months later she stated that the old pain had returned, and, though not nearly so severe as prior to the operation, her sleep was a good deal disturbed by it. The choreic movements appeared to be in much the same state as in February, 1883. Sensation was apparently equal in both thighs, and there was no delay in the transmission of impressions. When the spine was percussed the first and second lumbar vertebræ were found to be more tender than the others, and here also the hot sponge was more clearly felt. When measured two inches below the great trochanter, the right thigh was found to be 13⅞ in.; the left, at the same level, 14¼ in. As the limbs were not measured before the operation, no importance can be attached to this difference in the circumference. The muscles of the right thigh seemed not only smaller, but felt softer than those of the left.

So far as I know, no case of chorea has been recorded in which nerve-stretching has been tried. Nor would one, considering the pathology of the disease, expect much good to follow such a procedure. Few, however, will doubt that in this case the operation, undertaken for another condition, was followed by marked improvement in the chorea. Three years had elapsed when I last saw the patient, and even then the benefit had not entirely passed away. Signs, however, were not wanting to show that the disease, though slowly, was steadily resuming its old characters.

Chesterfield.

IS ALCOHOL A FOOD?

By T. W. THOMPSON, M.R.C.S.,
LATE SURGEON 1ST LIFE GUARDS.

IT is perhaps a little surprising that in this age of scientific energy a subject of such intrinsic importance and universal interest as the one I now propose to reopen should remain in the region of uncertainty. The importance of the subject becomes evident when we remember that the position occupied by alcohol in the civilised world, both as a staple article of diet and as a therapeutic agent, rests to a great extent on its supposed nutritive properties. The uncertainty with which the matter is still surrounded is sufficiently evidenced by the opposite opinions that continue to prevail, not alone among the general public, but even in the ranks of the scientific. These differences of opinion are often attributed to individual prejudice; I cannot but think, however, that, among the scientific at least, prejudice would ere this have succumbed to demonstration had this been forthcoming.

Without for a moment under-estimating the importance of the experimental researches of Anstie, Parkes, Dupré, Thudichum, and others, my contention is that, though the facts accumulated by those distinguished observers furnish a strong presumption in favour of the view that alcohol is a food, they nevertheless fall short of the requirements of proof. So much was admitted by Parkes himself, who said "the experimental evidence is incomplete (chiefly on account of the difficulty of collecting the amount given off by the lungs and skin)." In this sentence Parkes certainly points out the proximate cause of the failure of previous investigators to reduce the matter to demonstration, but as the difficulty of collecting all the alcohol given off by the lungs and skin (and we may add, bowels) amounts practically to an impossibility, I venture to suggest that the ultimate cause of their failure was that the logical arrangement of their experiments was unsuited to the peculiar conditions of the inquiry.

To explain my meaning more fully I must call attention to the plan upon which they proceeded, which was as follows:—Having administered a measured dose of alcohol to a subject, they endeavoured to collect the absolute amount eliminated by all the possible channels, with the view of comparing the amount administered with that eliminated, the difference between the two being assumed to represent the quantity that had been split up in the system and utilised as food. Now, if this method were practicable it could hardly fail to be conclusive; but, as already said, the difficulty of estimating the amount eliminated by the lungs, skin, and bowels with any degree of accuracy is, and probably always will be, insurmountable. This method, then, is never likely to furnish more than presumptive evidence, which must ever remain a prey to the criticisms of the sceptic. If we would reduce the matter to anything like demonstration, it would seem evident that we must resort to a different method.

I now propose an alternative line of investigation, which, in my opinion, is capable, if properly worked out, of yielding a positive result. The problem being to ascertain whether alcohol is or is not a food, we should endeavour to ascertain whether it is to any extent capable of taking the place of other foods. We cannot, unfortunately, proceed upon the simple plan of trying whether it is possible to sustain life for an indefinite period on a diet of alcohol alone, for since alcohol contains no nitrogen we know such a result to be impossible; it may, however, be a food nevertheless. The simplest and most conclusive method would seem to be the following:—

Ascertain, by a series of experiments arranged strictly in accordance with the Method of Difference, whether, of measured doses of alcohol administered, the amount elimi-

nated is or is not influenced by the amount of other food taken. For instance, supposing alcohol to be a food, then, other things being equal, we should anticipate that the amount eliminated when the demand of the body for nourishment had already been amply supplied from other sources would be greater than when the reverse was the case, as in starvation. This difference would be observable equally by all the channels of elimination; it would, therefore, be sufficiently conclusive of the connexion of cause and effect if the elimination by any one channel was carefully studied under these different conditions. The difficult and uncertain channels might thus be neglected, and the more workable one (the urinary) adopted for observation.

To bring out still more prominently the connexion of cause and effect, this line of investigation might be pushed further by proceeding to the nicer distinctions exhibited by the Method of Concomitant Variations. If we could show that, other things being equal, of measured doses of alcohol administered, the amount eliminated by the kidneys always varied *proportionately* with the amount of other food taken, the fact of alcohol being capable of taking the place of some of the other nutritive elements would be established by all the weight of evidence that the inductive methods are capable of affording.

Acting upon the views above expressed, I have, in conjunction with Dr. G. A. Hamerton, worked out a few experiments, which I record below, and which, as far as they go, point unequivocally to the conclusion that alcohol is a food. I say as far as they go, because, inasmuch as they are of limited extent, and were performed under considerable practical difficulties, I should not wish to attach too much importance to them in the absence of corroboration. When I first entertained the idea of working out this subject I hoped to be able to carry it through, but I soon found that the time and facilities for experimentation afforded by a straggling country practice were altogether inadequate to the requirements of the inquiry. I have therefore been obliged to abandon the notion of working it out more thoroughly myself, and I have come to the conclusion that under the circumstances the best course is to put my view of the matter (with such experiments as we have already made) before the profession, feeling sure that if that view is a sound one it will certainly be worked out by others who are fortunate enough to be possessed of the required opportunities. I must, however, point out that, while admitting the possibility of our results being modified by more extended observations, I have no want of faith whatever in the method I have suggested, but hold confidently the opinion that, if carefully worked out, it must settle the question of the food value of alcohol one way or the other.

Coming next to our experiments, I may say first that, with the view of avoiding unnecessary sources of error, they were worked out only upon ourselves and one friend, in whom we have the greatest confidence. The test employed was the chromic acid colour test used for a similar purpose by Anstie, Thudichum, and Dupré, and all the precautions suggested by those distinguished observers were carefully adopted. For the information of those who may not be conversant with the *rationale* of this test, I should perhaps explain that it depends on the power of alcohol to reduce free chromic acid, when well diluted with sulphuric acid, into sulphate or oxide of chromium, which reaction is evidenced by a change of colour from red to green, the intensity of the change corresponding to the amount of alcohol present in the suspected fluid. Our general plan was as follows:—

Two experiments were to be made on the same individual. In Experiment 1 a demand for nourishment was to be created by exercise and starvation; in Experiment 2 the demand for nourishment was to be reduced to a minimum by rest and feeding. All the other circumstances were to be, as far as possible, identical in the two observations. On each occasion the same quantity of alcohol was to be taken, in the same doses and at the same hours. The relative amount of alcohol eliminated by the kidneys in the two cases was then to be compared. In anticipation of the possible criticism that in the first observation the skin elimination would be favoured by the exercise, I must point out that the first dose of alcohol was not taken till an hour after the exercise was completed, and that every precaution was taken to reduce the skin elimination to a mimimum. Still, should this objection be seriously pressed, it would be easy, and perhaps more strictly in accordance with the Method of Difference, in any repetition of these experiments to vary the circumstance of food alone.

Experiment 1. — A. having abstained from alcohol for one week, the urine was examined on the evening of July 7th, 1884, and proved to be free from alcohol. The only food taken from 7 P.M. on the 7th till 9 A.M. on the 9th—an interval of thirty-eight hours—was, on July 8th, for breakfast, one egg, one small piece of toast (less than an ounce), and one cup of tea without sugar and milk; for lunch (1.30 P.M.), two ounces of beefsteak and one ounce of toast. On this day A. did an ordinary day's work, and, in addition, played two sets of tennis. At 7 P.M. he had a cold bath, put on cool comfortable clothes, and sat out of doors for the remainder of the evening. At 7.15 P.M. he passed urine, and at 7.30, feeling considerably exhausted, took the first dose of alcohol, which consisted of one-fourth part of a mixture consisting of an ounce and a half of Scotch whisky and two ounces and a half of water. The remaining three doses were taken at intervals of an hour. At eleven o'clock he retired to bed. All the urine passed between 7.15 P.M. on the 8th and 9 A.M. on the morning of the 9th was collected. Of this, 50 c.c. were put into a retort, with a little tannic acid to prevent frothing, and distilled to one-half through an air-tight Liebig's condenser into a receiver fitted with a mercurial valve. The distillate, to which was added a little caustic potash, was then redistilled. This second distillate was next distilled to one half with a little sulphuric acid. By these means the fluid was concentrated to one-eighth, and all the volatile alkalies and acids were removed. The final distillate was then put into a large test-tube which was connected by glass tubing on the one side to a continuously acting bellows, and on the other to a U-shaped tube containing a mixture of one part of dichromate of potash to three hundred parts of sulphuric acid. The U-shaped tube was again connected with a second test-tube containing the same acid mixture. Air was now pumped through the apparatus in a continuous stream for half an hour, and no change of colour occurred in the test solution either at the time or after standing.

Experiment 2.—After an interval of a fortnight, during which time A. had of course abstained from alcohol, the experiment already described was repeated on him, the only difference in the conditions being that on this occasion he ate as much and as often as he could, and exerted himself as little as possible. The whisky (out of the same bottle as before) was taken in the same doses and at the same hours, and the remaining details of the experiment were identical with those of the previous one. This time, when air was pumped through the urine distillate, a slight change of colour was soon observed in the test solution, which at the expiration of half an hour was of an evident greenish hue, which deepened after standing.

These two experiments were then repeated on B. and C., special care being taken to ensure that the conditions were identical with those of the previous experiments. In both of these cases the results obtained were exactly the same as those just described in connexion with A. While the subjects were creating a demand for nourishment by exercise and starvation there was no ascertainable elimination of alcohol by the kidneys. When, on the other hand, the demand for nourishment was reduced to a minimum by rest and feeding the elimination of alcohol by the kidneys was easily demonstrated, even after so small a dose as an ounce and a half of whisky, or probably about six drachms of absolute alcohol.

It will be seen that we only carried our experiments to the Method of Difference, and did not extend them in accordance with the Method of Concomitant Variations. The obvious reason was that, apart from want of time &c., a colour test is not sufficiently accurate for the nicer distinctions of the latter method, while the quantitative tests for alcohol are extremely difficult, and could hardly be worked out of a regular laboratory. Admitting that the case would be very much strengthened if corrobated by the Method of Concomitant Variations, I must at the same time express my belief that unless our results have been rendered fallacious by errors of practical manipulation, which I can hardly think probable, our experiments certainly indicate in the clearest manner that alcohol in small doses, at all events, is a source of nourishment—i.e., a food.

In conclusion, I must express my indebtedness to Dr. Hamerton for his valuable help in the practical working out of the experiments, without which, indeed, it would have been impossible for me, situated as I was, to have undertaken the inquiry at all.

Potter's Bar.

CASE OF

CARIES OF THE SPINE, WITH PARTIAL PARAPLEGIA, TREATED BY THE APPLICATION OF SAYRE'S JACKET;

RECOVERY OF POWER OF LOCOMOTION IN TWENTY-FOUR HOURS.

BY MARTIN OXLEY, M.D.,
CONSULTING PHYSICIAN TO THE LIVERPOOL INFIRMARY FOR CHILDREN.

MARY D——, aged ten years, came under notice on June 1st, 1883. There was disease of the fourth, fifth, and sixth dorsal, also last dorsal and first lumbar vertebræ, there being two distinct angular curves, the upper the more marked. She had been four months in the Aberystwith Infirmary under treatment. When discharged she had lost the use of her legs, and could not stand or walk. When seen by me she was unable to walk, although she could stand with assistance. She cried out suddenly with pain, caused by spasmodic jerking of her right leg. I applied a Sayre's jacket and a jury-mast while she was suspended, putting on extension enough to straighten the body, but without attempting to open out the two angular curves. The feet were flat on the ground, and she grasped the cross bar with her hands, an assistant giving her support and steadying her during the application of the jacket. She was then placed in bed. The next day, on my visiting her, I was told that she had been out of bed,[1] and had walked without difficulty. On hearing this I tested her walking powers, and found that they were quite restored. She went to her friends in Liverpool until November 10th, 1883, when she returned to have a new jacket. She was then in excellent health, and I exhibited her at a meeting of the Medical Institute. In June, 1884, she had a new jacket applied, and was able to walk about without any support. Now (April, 1885) the patient is again in Liverpool,[2] and has had a new jacket and jury-mast applied. She is able to go about quite comfortably without the support; but having seen bad results follow when the corset has been given up too soon, I intend to keep a light jacket on for some years.

Remarks.—The relation of this case will, I hope, convince those who doubt the efficacy of Sayre's mode of treating spinal caries—viz., by the application of a well-fitting plaster corset, which allows the patient at once to walk about and behave like a healthy individual. I consider the above as good an instance for testing Sayre's method as one could have. 1. The patient is old enough to speak for herself, and is highly intelligent. 2. She had previously been under treatment in hospital, under a skilful surgeon, by rest in the recumbent position. 3. She had disease of two separate portions of her spine—viz., the fourth, fifth, and sixth dorsal and the twelfth dorsal and first lumbar vertebræ. 4. She was unable to walk when she came under treatment. Further, a few days after the application of the jacket she was sent out into what we know too well as squalid Liverpool; and when she came to see me again, six months after the first application of the jacket, her dirty condition told very plainly how little care had been bestowed upon her.

Liverpool.

A NEW REMEDY IN GOUTY OBESITY AND DYSPEPSIA.

BY J. MORTIMER GRANVILLE, M.D.

I HAVE been obtaining some very good results of late in cases of gouty obesity and dyspepsia with a remedy which, although familiar and based on the simplest physiological principles, is, so far as I am aware, new as I use it. It occurred to me some time ago, as indicated by the physiological state in gout, chronic and irregular; and having now had ample opportunities of trying it, I venture to suggest it to practitioners generally, to whom I think it will at once commend itself as essentially *likely* to be of service.

One of the earliest, if not a primary, error of function in gout, whatever may be the real *cause* of that malady, is failure of the liver to secrete sufficient, or normally constituted, bile. The product of liver function is, as we know, excremento-recrementitial, the greater part of the bile being re-absorbed in the intestines; and among other uses in the economy, such as helping to hold the cholesterin, *and perhaps the uric acid*, in solution, it is destined to facilitate the proper digestion and assimilation of fats. If fat be not duly assimilated, it will be deposited crudely, as in the omentum and elsewhere, with the result of obesity, coupled with deficiency of heat production and maintenance; which is a very different thing from obesity with full or even excessive powers of calorification. I think it is important to make this discrimination between two distinct and totally different classes of cases. In the former class—common in persons with an inheritance of gout, in which there is obesity with a low grade of heat-force,—I am giving the biliary salts, extracted from ox bile, in the form of a pill, to be taken as pepsine is taken, with food. The results are very striking. The stools are rendered characteristically rich in bile without purging, the food is readily digested, and the accumulations of fat seem to melt slowly away. The taurocholate of soda with the glycocholate of soda are readily obtained from ox bile by evaporating to dryness and pulverising, making an alcoholic extract, filtering, and precipitating by small successive additions of ether. The deposit is non-crystallisable so far as the taurocholate of soda is concerned, while the glycocholate of soda appears, if the deposit be left to stand, in acicular crystals, forming themselves into rosettes. With any suitable excipient the mass may be readily made into pills, each containing about four grains of the taurocholate, and coated *so as not to dissolve in the stomach*. One should be given with each meal or immediately after food. The effect of this new remedy, both for defective digestion and assimilation, and for obesity in cases in which fat is accumulated instead of being burnt off in the system as nutritive fuel, will, I think, be found highly satisfactory.

Hanover-square, W.

AN INSTRUMENT FOR THE TRANSFUSION OF DEFIBRINATED BLOOD.[1]

BY T. W. CARMALT JONES.

THIS instrument is intended to be used for transfusing defibrinated blood. It could be equally well used for injecting milk or any other fluid into a vein. It consists of a holder (A), into which the defibrinated blood is to be poured; a tight-fitting metal cap (L), in the centre of which is a hole, a pipe leading from this hole communicates by means of an indiarubber tube with a valved handball (F). When the cap is in position on A, air can pass easily to A, but pressure on the handball will force air into A and compress it on the surface of the fluid in A. At the lower end of A is a piece of indiarubber tubing (B), which can be compressed by the clip D, and at the other end of the tubing is a hollow coned metal plug (C), which fits into the silver nozzle (M). The instrument with its accessories, as supplied in the case, provides all that is required for the performance of the operation of transfusion of defibrinated blood, with the exception of a clean ordinary tumbler, or, preferably, a small milk-jug and a basin of hot water. The steps of the operation are as follows. 1. Bleed the donor, in an adjoining room if possible, to five or six ounces into the measured vessel (H). 2. Whip the blood with the whip (P), and strain through the strainer into the tumbler or milk-jug. 3. See that the indiarubber tube (B), plug (C), and clip (D) are in place. Pour the defibrinated fluid into the holder (A), and put the cap (L) on firmly, then place the holder in the basin of water at 100° F. 4. Open a vein in the patient's arm, and insert the silver nozzle (M, K, or I)—three sizes of nozzles are provided—and block up the open end of the nozzle with the finger. 5. Have the holder brought to you; ease the clip until the fluid flows out of the plug, then tighten the clip again, take the finger away from the end of the nozzle, and insert the plug and remove the clip. Note the height of the fluid in A. The fluid in the holder is now in free and direct communication with the blood in the patient's vein. If any force is required, squeeze

[1] This was contrary to my orders, as I always keep my Sayre's cases in bed between the blankets for three days after the application.

[2] I again showed her to the members of the Medical Institute at one of their meetings, this time without the jacket.

[1] A paper read before the Harveian Society of London, March 5th, 1885.

the handball gently. 6. After the operation is over again note the height of the fluid in A, remove the short piece of indiarubber tubing (B) and burn it. The other parts can then be easily and thoroughly cleaned.

The instrument is very simple in action, has no delicate or complicated parts that can get out of order so as to cripple it, has no taps to puzzle the operator, and can be thoroughly cleaned and inspected. Supposing anything were to happen to the handball, an assistant could supply all the force required by blowing, though

H, Vessel marked in ounces for donor to be bled into. P, Whip to be used in H. F, Strainer of lawn muslin on wire frame. A, Holder to receive defibrinated fluid. B, Indiarubber tube about three inches long. C, Coned plug (hollow). D, Clip. L, Metal cap for A. T, Handball. M, Nozzle. K, I, Additional nozzles. E, Blood director.

not so conveniently as by the handball. The piece of indiarubber tubing at B is to be a clean new piece each time the instrument is used, and is to be burnt directly after use, so that no danger may arise from dried blood not removed after previous use. The inside of indiarubber tubing is rough and not easily cleaned, and cannot be inspected to see if it is clean. This piece of tubing allows sufficient play and breaks the rigidity, but is purposely kept short. The amount of blood taken from the donor and the exact amount injected into the patient will be known. The instrument is made for me by Mr. Hawksley of Oxford-street, to whom I am indebted for several practical suggestions.

ANTHROPOLOGICAL INSTITUTE.—At a meeting held on April 14th (Professor Flower, F.R.S., Vice-President in the chair), Dr. J. G. Garson read a paper on the "Inhabitants of Tierra del Fuego." Three tribes inhabit the Archipelago of Tierra del Fuego: they are called the Onas, who occupy the north and east shores, and resemble the Patagonians in being a tall race, chiefly living by hunting, but supplementing their food with shellfish and other marine animals; the Yahgans, who live on the shores of the Beagle Channel and Southern Islands—a short, stunted race, subsisting almost entirely on the products of the sea and birds; the Alaculoofs, who dwell in the Western Islands, and are closely similar to the Yahgans. These last two tribes lead a very degraded life, wandering from place to place; they possess no houses, but construct shelters out of the branches of trees; they build canoes of bark, and wear very little clothing. In stature they are short, the men averaging about 5 ft. 3 in., and the women about 5 ft. In cranial and osseous development they resemble the other wild native tribes of America, but by isolation have assumed certain characters peculiar to themselves. The population of the Fuegoan Islands appears to be about 3000.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas at morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

THE following two cases of hernia are of considerable interest. In the first, where hæmorrhage from a deeply-seated vessel complicated the operation for strangulated femoral hernia, we have an example of a condition which is very uncommon, and which, when it does occur, is usually due to an abnormal position of the obturator artery, the hæmorrhage arising from a wound of which is apt to be very troublesome. The second case is one in which the removal of the sac was carried out as an essential part of the treatment, and Mr. Hulke pointed out to his class the importance of closing the peritoneal cavity, and so preventing drainage backwards of discharges from the wound into the abdomen, a frequent cause of fatal peritonitis.

For the reports of the cases we are indebted to Mr. Ernest E. King, house-surgeon.

STRANGULATED FEMORAL HERNIA; OPERATION; RECOVERY.

(Under the care of Mr. J. W. HULKE.)

M. R——, aged forty-five, a washerwoman, was admitted on Jan. 29th, 1885, complaining of swelling in the upper part of the right thigh, accompanied with pain in the abdomen and retching. The patient states she has had a swelling in the right thigh since her last confinement, eight years ago, but it has never given her any inconvenience, and she has never worn a truss. Five days ago she got a "chill" and began retching, and, the retching continuing, she noticed the swelling in her thigh was larger than usual, and somewhat tender. Thirty hours before admission the symptoms became aggravated; bowels not open for three days. She describes the vomited matter as "clear, watery, and frothy."

The patient's state on admission was as follows. In the upper part of the right thigh, external to and below the spine of the pubes, was a swelling about four inches long by two and a half wide, its long axis being from below upwards and outwards. On palpation the swelling was fluctuating, and a thrill of fluid could be distinctly felt. The lower border was much better defined than the other. It extended beyond Poupart's ligament, and was superficial to it. No impulse on coughing; dull on percussion, except on a very small area close to the spine of the pubis. It was irreducible. She had also an umbilical hernia. The disease was diagnosed to be strangulated femoral hernia, probably both gut and omentum.

Two hours after admission the patient was placed under ether, and an incision was made over the inner border of the swelling until the sac was reached. On opening the sac a large quantity of bloody serous fluid escaped (roughly estimated at two ounces). The finger was then passed in, and the gut was found to be surrounded by adherent omentum in places; consequently the wound was enlarged upwards and downwards; one or two vessels were divided, but easily controlled. The finger was then passed to Gimbernat's ligament, which was divided. As the hernia was still irreducible, the omentum was isolated as far as possible, and the pedicle transfixed with an aneurysm needle and double ligature, and the omentum carefully snipped away with scissors. There was no further hæmorrhage at this stage. The gut was then returned, and two or three little oozing points ligatured. After they had been stopped it was noticed that there was still bleeding from the bottom of the wound, and a ligature was passed with an aneurysm needle beneath it and tied, and the hæmorrhage being apparently checked, the closing of the wound was proceeded with; but again blood welled up, and the wound was freely opened and large retractors introduced, and at once a comparatively large atheromatous artery was seen spouting away freely. From its position it was evident that this was a large communicating artery between the deep epigastric and the obturator, lying just behind Gimbernat's ligament; it gave

very great difficulty in securing, which was only accomplished by making a still freer incision and picking up both ends and tying. The wound was then washed with a strong solution of chloride of zinc, dusted with iodoform, a long drainage-tube inserted, closed with sutures, and dressed with antiseptic gauze. The portion of omentum removed, when spread out, was as large as the palm of the hand.

Jan. 30th.—The patient passed a fairly good night, although troubled by cough at times, which was treated with an occasional dose of linctus morphiæ. She had some little pain in the wound, and took three half-grain opium pills during the night and a little milk and lime-water.—9 A.M.: Pulse 104; temperature 101·4°. Some slight abdominal tenderness.—2 P.M.: Wound dressed; looking well; a little blood-coloured inodorous discharge.

31st.—9 A.M.: Pulse 96; temperature 100·2°; the temperature during the night had reached 102·2°; has a little bronchial catarrh. Ordered an ounce of compound draught of senega every four hours. Wound again dressed; looking well, but had some slight tenderness over abdomen.

Feb. 2nd.—9 A.M.: Pulse 100; temperature 100·8°.

3rd.—Pulse 100; temperature 100°. From this date the patient improved, the wound granulating well. The drainage-tubes were removed, and on March 17th she was walking about the ward wearing a truss and in good health.

STRANGULATED UMBILICAL HERNIA; OPERATION; REMOVAL OF THE SAC AFTER LIGATURE OF THE NECK; RECOVERY.

(Under the care of Mr. J. W. HULKE.)

E. O——, a man aged sixty-one years, was admitted at 9 P.M. on March 3rd, 1885, complaining of some vomiting and constipation, and a large swelling about the umbilicus. He stated that for five years he had suffered from hernia, but that he could always reduce it easily; for the last two years he had worn a belt, and there had always been more or less swelling. On March 1st, without any apparent cause, he experienced pain in the abdomen, and noticed that the swelling was larger; he vomited after taking any food. On the 2nd he placed himself under medical treatment. Ice was tried, and an attempt at reduction made, but this failed, and, the vomiting and constipation continuing, he was advised to come to the hospital; but twelve hours previous to admission he took a large dose of castor oil and fomented the rupture on his own responsibility. This failing to act, he sought admission.

On admission there was a large swelling about the size of the clenched fist in the umbilical region. Its upper surface was almost entirely denuded of epithelium from the application of poultices, ice, &c. On palpation the swelling was found to extend some distance beneath the skin, more than was apparent to the eye. It was very hard, gave no impulse on coughing, was irreducible, but only very slightly tender on manipulation. It was diagnosed to be strangulated umbilical hernia.

Mr. Hulke, being in the hospital, decided to place the patient under ether at once, and if taxis failed—which it did—to operate at once. The parts were first washed out with carbolic solution, and iodoform dusted into the umbilicus. A semicircular incision was made at the upper and left outer margin of the swelling, with the intention of dissecting down to the constriction, and reducing, if possible, without opening the sac; but after carrying the dissection down a considerable distance, it was found impossible to do this, and another incision was made, running outwards and upwards from the centre of the umbilicus, and cutting the previous one at right angles. The strictures were then very carefully divided until a deep red and congested tissue, which looked and felt exactly like the bowel, came into view, but the finger could not be passed round the swelling; and the incision was further increased by two diverging ones, and then beneath this thickened membrane a bubble of air and fluid could be seen, showing evidently that this was the sac, and it was consequently picked up and pricked, and a large quantity of blood-coloured watery fluid escaped, showing the sac had been opened. It was freely divided, and a large piece of omentum deeply congested came into view; this was pulled forward, and numerous double ligatures passed through and firmly tied; the mass was then cut away (it weighed twelve ounces). The finger was next passed down to the constriction, which was found to be very tight and fibrous, and was divided with a hernia knife; a few bleeding points were ligatured. The whole surface was then thoroughly washed with carbolic solution (1 in 20), and there being no bleeding whatever, the stump was pocketed. The sac was next dealt with, and was found to be adherent nearly throughout its entire outer surface to the abdominal wall; it was freed by stripping it away, pulled well forwards, and the finger introduced to its own base inside; a ligature was tied round at this point as the finger was withdrawn, and the upper portion entirely cut away. Drainage-tubes were inserted, the edges of the wound brought together with waxed silk sutures, iodoform dusted over, and gauze dressing and a binder applied. The operation lasted one hour and a quarter. Temperature at 12 (midnight) 97°; pulse 84.

March 4th.—9 A.M.: Pulse 90; temperature 96°. The patient has not been sick; expresses himself as feeling quite comfortable. Has had a few teaspoonfuls of wine, water, and milk. Fifteen ounces of urine were drawn off; sp. gr. 1025, acid, no albumen.—3 P.M.: Bowels acted, a copious semi-solid motion being passed.—8 P.M.: Bowels acted again.

5th.—12.30 A.M.: Pulse 96; temperature 99° in mouth. He complains of great thirst; liquids increased, and to take a little barley-water as well.—8.30 P.M.: Temperature 98·8°. Slept several hours. Pulse 100. He has some bronchial catarrh, probably due to ether. Ordered steam inhalations.

6th.—Wound dressed. Total absence of inflammatory swelling; slight serous, inodorous discharge; no tenderness. Evening temperature 100°.

15th.—The patient since last note has steadily improved; temperature normal; pulse 84; bowels acted well, and wound granulating freely. Drainage-tubes have been considerably shortened, and the patient is sitting up in bed, going on remarkably well.

CITY OF LONDON INFIRMARY.

CARCINOMA OF THE LIVER WITH GREAT CONTRACTION OF THE STOMACH, PRODUCING NO SYMPTOMS; NECROPSY; REMARKS.

(Under the care of Mr. W. GEM.)

GEORGE K——, aged fifty-six, a porter, was admitted into the infirmary on October 29th, 1884, suffering from fistula in ano. His condition on admission was pale and anæmic, with great debility and weakness, although no emaciation was apparent; there was a rather copious discharge from the fistula, which was situated an inch and a half up the bowel. He had faint dulness on deep percussion over the left apex of the lung, but no complaint as regards the abdomen, which was enlarged. The liver dulness somewhat exceeded the normal, and was slightly irregular on the surface, but with no pain or uneasiness. He had a little diarrhœa, which was soon stopped by an astringent mixture. He was placed on a nutritious diet and got slightly better of the discharge and debility, but still complained of lassitude. Operation on the fistula was deferred until his condition became more favourable. Not having improved after being under treatment for a month, he was again thoroughly examined, and on percussion over the liver complained of pain over the right hypochondrium, with irregular masses slightly increased. All through there was no vomiting or jaundice. The bowels again became free, but were stopped by lead and opium pills. His history, by the way, indicated no hereditary cancer; he was of temperate and regular habits, and had always done his work as a porter without any feeling of illness except the fistula, which troubled him at times. About a month before his death he complained of pain over the right hypochondriac region, increasing slightly, but not to any extent, and a sense of weight and fulness over the epigastrum, but still no vomiting or jaundice occurred. It was only a few days before death that he showed the unmistakable cachexia of cancer, and emaciation became very great, though he still took his food up to the last, without any trouble or vomiting. He gradually got worse, and sank on January 14th last.

The autopsy was made twenty-four hours after death, and revealed the following. The liver appeared double the size of normal in outline, weighed nine pounds, was nodulated on the surface, with flat tuberous masses of cancer of the encephaloid type, and was soft in consistence. The gall-bladder was normal in appearance, and contained four drachms of bile. There was, of course, great displacement of the neighbouring viscera. The stomach was contracted so as to be a mere tube of half an inch in diameter. The kidneys

were slightly atrophied and granular. The left apex of the lung contained some tuberculous masses. The heart was normal, likewise the other organs and viscera. The abdominal cavity contained a small amount of bile-stained fluid; the fistula was slightly cartilaginous half an inch above the anus, and there was a small cancerous nodule of the head of the pancreas of the same type as the liver.

Remarks by Mr. GEM.—The above is interesting inasmuch as cancer of the liver usually gives rise to pain, jaundice, and gastric disturbance, or symptoms of various import, which were conspicuous by their absence here, and usually causing a patient to seek relief before they have caused such great destruction and reached such a stage as in this case. There were nominally no symptoms suggestive of cancer until two or three weeks before death, although it was suspected all through, and no jaundice or vomiting, although the stomach was so contracted and the liver substance so destroyed. The case also shows that it is not incompatible with life for the organs to be in this state. The query arises, How were the functions of the liver and stomach carried on under such conditions?

LEICESTER INFIRMARY AND FEVER-HOUSE.

ACUTE HYDROCELE; PLEURISY AND PERICARDITIS; DEATH; NECROPSY; REMARKS.

For the following case we are indebted to Mr. C. J. Bond, house-surgeon.

George W——, aged sixty-five, a hedge-cutter, first felt sharp pain in the right tunica vaginalis five days before admission; this was followed in a few hours by rapid swelling, so sudden indeed that the patient thought he was ruptured. Two days later he complained of pain in his chest, with some shortness of breath, and gave up work. On his admission, three days later, there were loud friction-sounds over both sides of the chest, with signs of consolidation of the lower part of the left lung. The right tunica vaginalis was distended with fluid, and very tender. No enlargement of the testicle could be detected. The patient died three days later from the pneumonia and rapid pericarditis.

At the autopsy both pleuræ were found covered with thick layers of recent lymph, but containing very little fluid. The left lung showed consolidation of the lower lobe in the stage of red, passing in parts into that of grey, hepatisation. The pericardium contained two ounces of semi-turbid serum, and both surfaces were covered with recent lymph. The right tunica vaginalis contained about two ounces of clear serum, and the surfaces were coated with a layer of recent lymph, a quarter of an inch thick, and having the same naked-eye characters as that on the pleuræ—tough, white, and adherent. The testicle itself was neither swollen nor altered in colour or consistence, and the cord appeared normal. The other organs were healthy, as were also the serous membranes of the peritoneum and arachnoid, and the synovial membranes.

In this case a healthy man (his only previous illness had been an attack of rheumatism one year previously) suddenly suffered, without any blow, inflammation of the testicle, or apparent exciting cause, from a rapid and acute inflammation of the right tunica vaginalis. In forty-eight hours the pleuræ had commenced to take on inflammation of a like nature, and in eight days from the onset of the symptoms the man died from acute pericarditis. No record can be found of inflammation of the tunica vaginalis arising thus in cases of this kind; neither Bransby Cooper, Velpeau, nor Syme mention it in their comprehensive lectures on the subject in the years 1852, 1854, and 1855; so that it would seem to be a rare complication, and the etiology and exact pathology of the hydrocele in this case seems obscure. We are of course familiar with the ordinary hydroceles of children and adults, with the hydrocele arising after inflammation or disease of the testis called by Velpeau acute, but really secondary, and the cases of hydrocele following injury without the testicular implication. But in this case there was a general inflammation of the serous membranes of the body, and in this inflammation the tunica vaginalis takes part. The naked-eye characters, too, of the products of the inflammation, the thick white lymph, and the scanty, almost clear, fluid are alike. Moreover, the somewhat large round organisms described by Friedländer as characteristic of pneumonia were found not only in the pneumonic lung, but also in the pleural fluid, and, what is noteworthy, in that of the hydrocele. Are we, then, to regard the inflammation of the tunica vaginalis as a part of the general inflammation having a common cause with it, a view rendered probable by the absence of any other cause, by similarity of appearance, and the presence of the organisms? If so, in what relation does the pneumonia stand to this inflammation? Was it really the primary affection, and the others secondary, due to an escape, as it were, of the organism? But, supposing this view of the hydrocele to be correct, is it not strange that, with so many cases of pleurisy, the tunica vaginalis is so rarely, in fact never, affected. It might be supposed that the man was suffering from some form of septic poisoning, and that the hydrocele was really a secondary process or pyæmic abscess; but this is unlikely, because there were no symptoms of septicæmia, the temperature was the continuously high temperature of pneumonia, there were no rigors, and especially because the fluid in all the cavities was clear serum, and the lymph white and tough, quite unlike the appearance of any septically-inflamed serous membrane or pyæmic abscess.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Displacement of Lumbar Vertebræ.—Cerebral Arteries in States of Congestion.—Hypospadias.—Destructive Disease of the Lung.—Acute Ulceration of Colon.—Cyst growing from the Wall of the Intestine.—Cases of Gastrostomy.

AN ordinary meeting of this Society took place on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. The number of card specimens exhibited was very large.

Mr. ARBUTHNOT LANE read a paper on the Modifications which the Lumbo-sacral Articulation undergo as the result of transmission of superjacent weights through it to the pelvis in labourers. He found that the changes varied within broad limits, having at one extreme those cases in which the centre of pressure fell behind the body of the fifth lumbar vertebra; in the other extreme the centre of pressure fell somewhat in front of the body of the last lumbar vertebra, so that there was a marked tendency to forward displacement of it, which was opposed by the articular processes of the vertebra. In this case the spinous processes did not share as they did in the first set of cases in supporting or transmitting the weight to those of the sacrum, which were proportionately to the bodies but slightly developed. Mr. Lane has now found two remarkable modifications of the lower part of the spinal column resulting from pressure. The first of these presented most of the changes characteristic of the first group referred to above. The spinous processes and laminæ of the sacrum were enormously enlarged and were very dense. The bodies were small and cancellous in structure. The body of the fifth lumbar vertebra was displaced backwards, producing a condition diametrically opposite to that called spondylolisthesis. The second specimen, although appearing to belong to the second class of pressure changes, was perceived on vertical median section to belong to the first class. The subject from whom it was taken was a man who had carried heavy burdens on the left shoulder, back, and neck. The lumbar spine was very convex and presented the appearance of spondylolisthesis. On section the last fibro-cartilage was seen to be increased in depth, so that the weight had been transmitted to the sacrum chiefly through the spinous and articular processes, which were very much thickened and increased in strength. The sacrum had yielded transversely about its centre, the upper part going forwards and downwards, so much so that if the plane of the upper surface of the sacrum were continued forward it would pass one inch below the lower margin of the symphysis. The diameters between the angle of the sacrum and the upper and lower margins of the symphysis were three inches and a half. The spinous processes of the sacrum were much enlarged, as were the laminæ. The sacrum had during the later period of life been acted upon by an upward pressure, probably due to a continuous sedentary position. This position had served to increase the anterior concavity of the sacrum still further.

Dr. HANDFIELD JONES showed specimens of Cerebral

Vessels in states of Congestion. Some of the specimens were taken from cases of meningo-cerebritis, but others came from subjects who died from no special disease. He described capillaries obstructed by large leucocytes which were not nuclei of the capillary wall, for they were more numerous and rounded, and changed shape under pressure and stained better than these. The leucocytes probably collected during the last hours of life, and this appearance was well seen in a specimen of omentum; the red corpuscles were not to be seen in the area of aggregated leucocytes. He also described specimens in which there were many more and bulkier corpuscles than those above referred to. Growth of pre-existing cells or accumulation of white corpuscles might explain the appearances. In some specimens cells $\frac{1}{1000}$th of an inch long were to be seen elongated, with their long diameter placed parallel to, across, or obliquely with the vessel; some were free in the channel of the vessel; these might occur in large groups. He did not think that they were endothelial particles, but looked on them as proliferating muscular nuclei. Other corpuscles which appeared to be quitting small arteries, capillaries, and veins were described, and the amœboid qualities of corpuscles were referred to as having been manifested in tissues outside the vessels of the pia mater. Again, rounded or short ovoid corpuscles which were probably overgrowths of portions of muscle nuclei were described. Dr. Jones thought we should distinguish between the muscle fibre and the muscle nuclei; the former may disappear whilst the latter hypertrophy. He then made some remarks on these states of corpusculation, and gave the different views which might be held to explain the occurrence of masses of similar corpuscles. In some of the specimens the capillary walls were sometimes very indistinct. These changes could be witnessed in inflamed areas, where the capillaries appeared fluffy and granulous at times. It seemed as though the vessels were converted into soft granulous matter. Mention was made of small films of unstained protoplasm which could be detected in the neighbourhood of the vessels. Other appearances of a wide meshed plexus of fibrin were described as to be seen in arteries and veins of the cerebral tissues. He considered that many of the appearances were best explained as overgrowths of muscle nuclei with detachment and escape owing to denudation of the vessel wall. There might be a formation and accumulation of corpuscles within the vessels as well as overgrowth of corpuscles. These changes had been met with in cases of meningitis and typhoid fever and other states of cerebral congestion, but they were not necessarily morbid, as they might be found in subjects dead from any cause.

Dr. WILLCOCKS exhibited a specimen of Hypospadias in a seven months' child. The sex of the child was supposed at first to be feminine, and she was christened "Rebecca." There was a slight depression, which was a sort of a rudiment of a vagina, situate between the urethra and the anus. Nodules, which were obviously testes, were felt in the apparent labia. Mr. Symonds drew back the central preputial fold and exposed a minute glans penis. The penis gradually increased in size. The patient died at the age of ten months from the sequelæ of measles. At the autopsy, the male organs of generation were readily recognised, and there was no uterus or vagina. The left obliterated hypogastric artery could not be found. This was a case of mistaken sex. Another was mentioned as having been under Mr. E. Owen's care at the Hospital for Sick Children, Great Ormond-street; this child up to the age of sixteen months was regarded as a girl. Another case of Dr. George Buchanan's was referred to.—Mr. R. J. GODLEE said that he had seen an almost similar case at the North-Eastern Hospital, but there were no testicles on the apparent labia, and there did appear to be a rudimentary vagina.—Mr. J. H. MORGAN had seen cases of the kind under discussion, Sometimes the external organs were those of the female and the internal organs those of the male. Otto had described in the sheep a case of genuine combination of male and female parts, but he was uncertain whether this mixture had ever been observed in man.—Dr. WILKS believed John Hunter had pointed out that when the testes did not descend the physical frame had a feminine configuration.—Dr. BRISTOWE narrated the case of a supposed Welshwoman who became a nurse at St. Thomas's Hospital. She had a beard and moustache, and walked and talked like a man; the parts concerned were preserved in St. Thomas's museum. He doubted whether any genuine combination of sexes ever existed.

Dr. PERCY KIDD exhibited two specimens of Destructive Disease of the Lung from Obstruction of the Main Bronchus, and gave the following history of the patients. In Case 1, a man, aged thirty-eight, who had had syphilis twenty-three years previously, came into the hospital with signs of aneurysm of the aorta and consolidation and excavation of the left lung; the left radial pulse was smaller than the right. He had a paroxysmal cough, and expectorated nummular purulent sputum. His left arm was noticed to become œdematous. At the post-mortem examination a large aneurysm was found involving the descending aorta and compressing the left bronchus and, to some extent, the trachea. The aneurysm was very thin-walled, and contained a small thrombus at the posterior aspect, where it was attached to the spine. The right lung was healthy. The left lung was large and of equal size with the right, riddled throughout with cavities situated in pigmented fibroid tissue, and intersected by numerous bands of a similar tissue. The cavities had a bronchiectatic appearance in some instances, and all contained reddish puriform liquid and some soft caseous material. The liver, spleen, and intestine were slightly amyloid. In Case 2, a married woman, aged twenty-five, had cough, pain in the chest, dyspnœa, night sweats, and wasting; she had no kind of sore-throat or skin eruption; her fingers were clubbed; there was a large circular ulcer on the left thigh, with scarring and pigmentation over the leg. The left chest was dull and almost motionless, vocal fremitus weak, and bronchial breathing and pectoriloquy were noted. There was a paroxysmal cough, and the sputa were nummular. Puncture gave a negative result. She died from albuminuria and general dropsy. At the autopsy there was extensive scarring of the trachea involving the left bronchus, which was much constricted. The left lung was riddled throughout with trabeculated cavities, separated by fibroid lung; the lung was bronchiectatic in some parts. The contents of the cavities consisted of a reddish fluid and some putty-like material. There was recent tuberculosis in the other lung. The other viscera showed amyloid changes. In both cases the sputum was examined for tubercle bacilli without success. He referred to Dr. Pearson Irvine's cases, and thought the specimens shown supported the views put forward by that gentleman, that the breaking down of the lung was due to the pressure on the bronchus, and stagnation of air and secretion in the bronchi.—Dr. CREIGHTON inquired for a history of syphilis in either case, and suggested this agency as a cause of the pulmonary disease.—Dr. GOODHART spoke of the ulceration of the bronchus at the seat of pressure. He thought there were stages in the disease of the lung from fibrous and solid down to caseation and destruction. He suggested that the presence of ulceration might have led to some infection of the pulmonary tissues.—Dr. EWART said that in cases of collapsed lung as the result of pressure on a bronchus he had found no trace of ulceration. Causes might act from within and produce destruction, for inside the air-tubes there might be retention of secretion followed by decomposition and ulterior changes.—Dr. F. SEMON said that Pearson Irvine, as well as he himself, had always found ulceration of the bronchus opposite the seat of pressure of an aneurysm.—Dr. EWART said that was true, but he referred to ulceration from pressure of the pulmonary tissues, and thought that Dr. Goodhart spoke of these tissues, but the last-named gentleman said that he had spoken of the bronchus.—Mr. GODLEE asked whether there was any analogy between the changes and those observed after "cut throat" where it was probable that the accumulation of secretions was the efficient cause of the pulmonary disease.—Dr. HALE WHITE considered that the amount of pressure on the bronchus might explain the differences observed in different cases.—Dr. BRISTOWE did not feel certain that the destructive changes were not antecedent conditions to the pressure on the bronchus. In a case of meningitis in an adult supposed to be tubercular there were signs of cavities in one lung; the autopsy showed no tubercle, but the cavities in the lungs, smooth lined as they were, had no doubt originated early in life. Again we must be sure that no pressure existed on the vessels before attributing the destructive changes to pressure simply on the bronchial tubes for these might communicate later on with cavities formed as the result of vascular obstruction.—Dr. PERCY KIDD, in reply, said that the aneurysm was probably of four years' duration in the first case, and the stricture had lasted one year and a half in the second case. Pressure on the vessels could not be excluded in the first case, but could be in the second. He did not

think there was primary syphilitic disease of the lung though, as he had stated, syphilis was mentioned in the history of each case. The mechanical effects of obstruction of the tubes he believed should be charged with the chief part of the causation; there was no collapse of the lung in either case.

Dr. ALLCHIN showed a specimen of Acute Ulceration of the Colon. The patient was a middle-aged woman, admitted into Westminster Hospital on Jan. 4th. 1885, where she died eleven days later. She had been married nine years, and had had five children; had worked hard as an ironer. She had suffered much from constipation, and had passed blood occasionally. Acute symptoms began on Dec. 27th, 1884, about six weeks after confinement; there were pains and diarrhœa of distressing character. On admission she looked very ill and was emaciated. There was a white furred moist tongue. The pulse was 112, soft and dicrotous; the temperature was 101°. There was total suppression of urine, with anorexia and thirst. The pulse gradually became more rapid, and the excessive diarrhœa continued; the temperature varied between 99° and 102°. There was much pain and tenderness about the colon and some tympanites; the urine was not albuminous. The motions varied much in appearance; the colour of them was grey and yellow, and mixed with blood, and sometimes they looked like dark fluid blood, but small globules of mucus were always present. At the necropsy, made twenty-six hours after death, Dr. Allchin found the colon to be the only part diseased; it was slightly congested externally, but there was no peritonitis. There were numerous large ulcers with their long diameters transverse to the axis of the bowel; they had a clean base which was not thickened; the edges were thick and vascular, and in places undermined. The ulcers varied in size from an inch and a quarter to one line in length, and were extensively distributed over the large intestine. The subjacent muscular tissue was laid bare in many of them. No dilatation or hypertrophy of the intestine existed. The case belonged to that class which had been described as "follicular ulceration of the colon." Reference was made to many points of clinical and pathological importance. The symptoms may be very slight in such cases, and the only symptom present may be great irregularity of the bowels. He considered that the cases were not quite like those of acute dysentery. The question as to why the solitary glands were the primary seat of inflammation was broached; as the same structures exist in the small intestine, it is difficult to see why they should not be affected also.—Dr. WILKS made reference to the medico-legal aspect of such cases, and said that Dr. Copeland and others had expressed the opinion that such cases could not occur in this country, and so, when such changes were seen, an irritant poisoning would be diagnosed. He did not share that opinion.

Mr. BATTLE exhibited a Cyst removed from the wall of the Small Intestine. The patient was a married woman, aged thirty-five. Eight years before admission to St. Thomas's Hospital under the care of Dr. Bristowe she had had an attack of jaundice, accompanied by ascites and swelling of the legs; the jaundice disappeared in two years, but the dropsy endured five or six years. The swelling of the left side of the abdomen was observed when the dropsy subsided. She had suffered for eight years from periodical bilious attacks. The tumour was tender at the menstrual periods. The patient was anæmic and well nourished. There was a rounded swelling in the left hypochondrium, immediately below the costal arch, the size of a large egg, movable, but not with respiration; it was tender and painful. In the hypogastrium was another swelling, hard, also tender and somewhat movable, smooth, and extending from the left side of the middle line into the right iliac fossa. Three months after admission Mr. Sydney Jones removed the cyst by abdominal section; it was found to be attached to the small intestine, being sessile, and occupying a considerable section of the intestinal wall, to which it was firmly attached, and from which it was carefully peeled. A few vessels required ligature, but the thermo-cautery was required to arrest the general oozing from the intestine. There was a varicose and dilated condition of the lymphatics on the surface of the intestinal folds. The pelvic tumour was a uterine fibroid. The operation was performed antiseptically, and the patient made a good recovery, leaving the hospital thirty-seven days later free from pain and in improved health. The tumour was smooth on the surface and the size of a small orange, white and glistening. It had a laminated wall, but there was no evidence of glandular structure nor of epithelial lining. The fluid was thick and looked like yellow paint. Cholesterine crystals, fat, and molecular matter were found by the microscope, and fat and albumen by chemical examination.—Dr. BRISTOWE did not think it was a hydatid tumour.

Mr. BRUCE CLARK showed two specimens removed from two cases of Gastrostomy. In one case the obstruction was situate low down at the cardiac end of the œsophagus, and in the other it was situate high up in the gullet. A successful operation had been performed in both. In the first case the stricture was pervious and the stomach was not contracted. This contrasted with the other case, where the stomach was greatly contracted and the stricture was impervious. In the latter case bile was discharged from the gastrostoma. This proved to be due to the opening having been made to the duodenal side of the pylorie orifice; the incision was made well to the left of the rectus, but the contraction of the stomach no doubt caused the awkward position of the opening. One patient lived seven weeks and the other six weeks; both died from asthenia.

The following card specimens were shown:—Mr. Godlee: a recent specimen of Acute Necrosis with Pericarditis and Large Patches of Softening of the Left Ventricle. Dr. Norman Dalton: Multiple Angiomata of the Liver. Dr. C. Turner: (1) Tumours in Adrenals; (2) Suppuration of Simple Fracture of the Hyoid Bone. Dr. Silcock: Enterocolitis. Dr. Goodhart: Specimens of Enteritis and Colitis. Mr. J. Hutchinson, jun.: Hydrocele of the Cord. Dr. Hebb: Aortic Valvulitis with Embolism of a Coronary artery and Middle Cerebral Artery. Mr. Shattock: Fracture of Superior Cornua of Thyroid Cartilage. Dr. Chaffey: Solitary Kidney (congenital). Dr. Hale White: (1) Enormous Hypertrophy of Heart; (2) Large Triple Phosphate Renal Calculus. Dr. G. N. Pitt: Syphilitic Ulceration of Larynx and Trachea. Dr. Hadden: (1) Broad Ligament Cyst containing Coagulated Albumen; (2) Ulceration of Intestine originating in hæmorrhage. The patient was leucocythæmic.

MEDICAL SOCIETY OF LONDON.

Treatment of Gangrenous Intestine in Strangulated Hernia.

AN ordinary meeting of this Society was held on Monday last, Dr. W. Miller Ord, F.R.C.P., President, in the chair. A well sustained discussion followed the reading of the paper.

Mr. MITCHELL BANKS read a paper on the Treatment of Gangrenous Intestine in Strangulated Hernia. The author dealt with two main propositions. The first was the consideration of the question whether the surgeon should leave the gangrenous gut where it was, merely incising it and awaiting the formation of an artificial anus. The second was the consideration of the question of excision of the sloughing bowel and restoring the continuity of the intestine. A case illustrative of this second method of procedure was narrated. On Nov. 7th, 1883, a cook on board ship, aged twenty-five, was admitted into the Liverpool Royal Infirmary for strangulated inguinal hernia of the right side, which came on three days before as the result of exertion; the strangulated bowel could not be returned, and when admitted all the symptoms of strangulation were well marked. Previous attempts at reduction had been made and the hernial tumour had been aspirated, but without avail. On the third day of strangulation the pulse was 80, and there was no fever; the scrotum was livid, swollen, and tense, with bullæ under the skin; the penis was œdematous, and the parts had the appearance rather of rupture of the urethra than of strangulated hernia. An incision was made and the sac dissected out. The hernia was found to be a congenital one. A great deal of dark bloody fluid and a long loop of the small intestine, which was swollen and black, with a few flakes of lymph thereon, were found in the sac; the peritoneal coat was dull, and an offensive sanguineous fluid drained away. The removal of the dead intestine was decided upon, and division of the stricture was practised. An ulcerated aperture, due to a stricture higher up, was found, but no blood was extravasated into the peritoneal cavity. In the operation a wedge-shaped piece of mesentery was removed, and gave rise to profuse bleeding, which was controlled by the application of a score of fine catgut ligatures. The peritoneum of the mesentery was united by a continuous suture of catgut, first on one side and then on the other.

Then the edges of the gut were turned inwards for a third of an inch, so that peritoneum should come against peritoneum; the mucous coats were united by interrupted sutures, and continuous sutures were used outside these and through the peritoneum only. The method was that of Czerny-Lambert. The inguinal canal was freely divided to allow of the reduction of the intestine. Then the sac was secured by two catgut ligatures and divided between and excised, the lowest part being left to form a tunica vaginalis. The operation lasted altogether two hours, and antiseptics, with drainage-tubes, were used. The collapse passed away in a few hours, and the patient passed flatus ten hours after the operation. The temperature seldom rose one degree above normal, and was for some time after the operation several degrees below normal; a temperature of 100° was the highest reached; the tongue was moist throughout, and the abdomen flat. The portion of the sac left became slightly sloughy, where it formed the tunica vaginalis, but this soon healed. Sponge dressings were used. The man was of placid temper, and showed great fortitude, lying quietly on his back without restlessness for one week. For four days only ice was sucked by the mouth; then some twenty minims of meat-juice were allowed, and the dose of this was increased slowly. Nothing more was given by the mouth until the twelfth day, except a little opium. Absolute rest and warm clothing were insisted upon, and served to prevent waste of tissue. On the twenty-third day the bowels acted after an enema. At the end of six weeks the man was well, and ate plain food. He was in robust health some months later, and seventeen months after the operation he was in a situation in Canada, and there was no reasonable fear of stricture of the intestine supervening. The author then gave an account of statistics, and quoted especially a paper of Mr. Makins, in which 55 cases of gangrenous intestine were tabulated; 45 of these were resected, and gave a mortality of 29 deaths, or about 52 per cent. Death was generally attributed to septic peritonitis. Most of the cases were operated on by German surgeons. A few had been recorded by English and American surgeons. Of 40 cases of resection of the bowel for the relief of artificial anus, there was a mortality of 38 per cent., as against 52 per cent. above mentioned. With regard to the first question, he narrated 6 cases of gangrene which had been under his care, and in which the gangrenous gut was simply laid open, the stricture being left untouched. Of these 3 lived and 3 died; two of the latter were moribund when operated on, and the third died as the result of rupture above the stricture. He thought that there could be no doubt as to the propriety of slitting up the bowel, but it was another question whether the surgeon should interfere with the stricture. Sir Astley Cooper and others advised division of the stricture, but he believed that the best method was to leave the stricture alone. He said the cases did not die from general septic peritonitis, but from absorption of septic material from the peritoneal cavity. He likened the stricture to a rigid ring on the finger, and thought the methods of treatment should be the same in the two cases. As to drawing down a fresh piece of intestine into the abdominal opening, he thought it could be done without dividing the stricture, but would wait for practical experience to say whether the drawing down of fresh intestine was a good mode of procedure. He concluded by asserting his belief that the number of cases in which primary resection of the gangrenous gut could advantageously be performed would be found to be comparatively few.

Mr. FREDERICK TREVES thought that primary resection should be performed in a large series of cases, and he failed to see what great surgical difference there was between excision and incision of the gangrenous gut. There were two methods of dealing with the case after excision had been performed. The surgeon might leave the case till an artificial anus had formed, and then attempt to close the false anus or resect the bowel later on, or he might restore the continuity of the bowel immediately after the excision of the gangrenous portion. The length of time required for the latter operation was a serious element in the case. From a series of experiments on resection of the intestines in dogs, he had come to the conclusion that there was great risk of the parts sloughing if the mesentery were cut so that the main arteries going to the loops of vessels in the mesentery were divided. He preferred Chinese twist to catgut for sutures. In Littré's hernia the stricture ought not to be divided.

Sir WM. MAC CORMAC agreed with Mr. Banks that immediate excision of the gut was not likely to be performed in a large series of cases. He also concurred in the view that the stricture should not be divided.

Mr. MORRANT BAKER also thought that excision and immediate union of cases of gangrenous gut could be but rarely carried out. He narrated a case of acute gangrenous strangulated hernia. He had not yet made up his mind as to the question of division of the stricture, although, following the teaching of his seniors, he had usually carefully divided the stricture. He did not regard with favour the pulling down of fresh bowel.

Mr. JOHN H. MORGAN referred to the difficulty of being sure of removing all the gangrenous gut, for the parts around the actual slough might be in a state of incipient gangrene. He considered that the best practice was the ordinary one of leaving the gangrenous gut *in situ*. An artificial anus could be dealt with later on.

Mr. MAKINS still held to the conclusions at which he had arrived in his paper to which reference had been made. He still thought that a clamp was an advantage in resecting the intestine, which should, however, be a secondary and not the primary operation.

Mr. A. PEARCE GOULD was of opinion that any further drawing down of the intestinal loop would, by increasing the thickness of the stalk of mesentery, lead to a further spread of the gangrene to the fresh bowel drawn down unless the stricture were divided.

Mr. BERNARD PITTS considered that the duration of the strangulation was an important element in deciding on primary or secondary resection; where the strangulation had lasted a long time resection at the time would be most unfavourable.

Mr. WALTER PYE spoke of an increased strain on the mesentery due to a further drawing out of bowel. He referred to a case of gangrenous intestine in which he had established an artificial anus. During exertion the open bowel slipped into the abdomen and caused the death of the patient from peritonitis.

Dr. ORD spoke of the valuable practical discussion which the excellent paper had brought forth.

Mr. M. BANKS, in reply, said that Mr. Treves' recommendation of cutting off the sloughing part, dividing the stricture, and pulling down fresh bowel was practically what Mr. Spence used to advise.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of the above Society was held on Wednesday, April 1st, Dr. J. B. Potter, President, in the chair.

The following specimens were shown:—Dr. Galabin: Fibro-sarcoma of the Chorion; Dr. John Williams: Papilloma of the Peritoneum; Preparations of the Injected Uterus, showing the Circulation; Microscopic sections.

The following papers were read:—

Sequel to a Case of Ovariotomy.—Dr. MURPHY removed a large cystoma of the left ovary from a multipara on January 16th, 1882, and, finding the right ovary enlarged and the seat of cystic disease, he passed a double ligature underneath it, and, having firmly secured the ligatures, punctured the cysts and removed portions of the ovary. The patient made an excellent recovery, menstruated on the third day after the operation, and was regular for nine months, when she became pregnant and gave birth to a healthy male child on June 9th, 1883. The possibilities of a third ovary and the slipping of ligatures were considered and rejected. Attention was directed to the erroneous drawings of the relative positions of tubes and ovaries usually given in the text-books. The author believed that the ovary was usually found superior and posterior to the tube, and hence the tube escaped being ligatured, and the ovary survived (as does the distal portion of the stump) and was able to perform its functions in that diseased and mutilated condition. At the date of the report there is no appearance of a cystoma of the right ovary.—Dr. HERMAN said that there were two points of interest in Dr. Murphy's paper. One was the position of the ovary in relation to the Fallopian tube. The arrangement described by Dr. Murphy had been also described by Mr. Doran in his recent book, and Dr. Herman had himself seen this arrangement. The other point was the effect on the blood-supply of the ovary

produced by ligature without removal of the ovary. Professor Simpson had done this in a case recorded in vol. ix. of the Edinburgh Obstetrical Transactions, but as this was followed by an attack of peritonitis three months later, it was less instructive than Dr. Murphy's case, which seemed to prove that simple ligature could not be depended on to arrest the function of the ovary.

On the Circulation in the Uterus, with some of its Anatomical and Pathological Bearings, by Dr. JOHN WILLIAMS.—The author remarked that although the blood-supply to the uterus is well known, the circulation in the uterus has been less minutely studied, though its importance, both physiologically and pathologically, is great. After briefly sketching the course of the ovarian and uterine arteries as they approach the uterus, the author remarked that all the primary branches enter the uterus on the side; they do not enter deeply into its tissue, but run a somewhat superficial course, being separated from the peritoneum by only a thin layer of muscular fibres. They run in a distinct and even a considerable layer of connective tissue, which is more distinct in the fœtus and infant than in the adult. The muscular stratum between it and the peritoneum is thin, while that between it and the canal forms the greater part of the thickness of the uterine wall. The branches run towards the mucous surface in a perpendicular direction to that surface, anastomosing freely, and ending under the mucous surface in capillary loops, which are often visible even in organs which have not been injected. The veins in the organ are arranged in a similar manner, and convey the blood into the venous plexuses which lie with the arteries in the layer of connective tissue already mentioned, and which communicate freely with the venous trunks outside. The return of blood is said to be effected principally through the ovarian veins; but both these veins can be (as is well known) tied without appearing to materially affect the return of blood from the uterus; indeed, the whole of the pelvic venous system can be injected through any one of its larger trunks. The following conclusions were drawn:—1. The layer of connective tissue in which the arterial circles run, and in which the venous plexus lies, is the submucous tissue of the uterus. 2. The whole thickness of the wall between the layer of connective tissue and the uterine cavity is the mucosa uteri, and the thin layer of tissue shed at the menstrual period and reproduced (the menstrual decidua) is only a very small portion of the uterine mucous membrane. 3. The vascular arrangements are such that the circulation in the uterus can hardly be disturbed by mechanical causes. The entrance and exit take place at numerous points at the sides of the uterus, and in the uterus the direction of the current is transverse to its length and perpendicular to its surfaces; so that a ligature might be placed around the uterus at any point above the vaginal insertion without affecting the circulation above or below. The only ligature which could materially interfere with the flow of blood into or out of the uterus is one surrounding each broad ligament, including their upper borders, together with a portion of the uterus. Conditions like these are found when the uterus forms a hernia in the inguinal canal or in Douglas's pouch in the condition usually, but inadequately, spoken of as retroflexion or retroversion. Both conditions are those of true hernia, and the symptoms are largely due to constriction at the neck of the sac, formed, in posterior hernia, by the sacro-uterine ligaments. In procidentia, again, stretching of the vessels may produce considerable narrowing of their calibre. These two conditions, hernia of the uterus and great procidentia, appear to be the only displacements of the uterus which can give rise to congestion of that organ. The author also described the following experiment to test the influence of flexions in causing congestion. He stitched the fundus of the uterus closely to the cervix, thus securing the acutest flexion possible, and then injected a coloured fluid into one of the veins of the broad ligament; immediately the veins of the other side of the uterus became distended with the injection. On making a section, the whole of the veins in the uterus were found injected. This proves what the arrangement of the vessels has already shown, that the acutest flexion does not interfere with the flow of blood from the uterus. The paper was largely illustrated by diagrams and specimens.—Dr. GRAILY HEWITT was not surprised at the elaborate arrangements existing in the uterus for providing for free circulation when the organ was flexed. Flexions were doubtless common, and the vascular arrangements were secure against temporary or slight flexions. But in severe or sudden flexions there would be much danger of congestion at the two ends of the uterus. Such congestion occurred in the limbs when bent. His experience was that congestion in cases of flexion was relieved by straightening the uterus, and hence the explanation suggested itself that compression at the central part produced the congestion. He believed incarceration of the fundus by the sacro-uterine ligaments to be extremely rare. Even if it were commoner, it had no bearing on anteflexion, in which there were no ligaments to cause incarceration. Swelling of one lip of the cervix often indicated flexion on the side of the swelling, and argued for the production of congestion by flexion.—Dr. HERMAN pointed out the great frequency of flexion without any symptoms. That flexion was often combined with congestion depended on the frequency of flexions, and must be the case unless flexions prevented congestion. There were cases of sudden backward displacement with acute symptoms, quickly relieved by replacement, which had no analogy in anteflexion. There were also cases of retroversion without flexion, attended by congestion, and relieved by elevation of the fundus. Such cases were not explained by any theory of flexion, while they were explained by the action of the sacro-uterine ligaments; they were not common, and incarceration in Douglas's pouch was rare, because the ligaments were seldom tense enough and close enough together to be capable of incarcerating the uterus; when they were, they were generally high up and hard to reach.—Dr. GALABIN said that the author had proved that the vascular arrangements in the uterus were such as to prevent as much as possible congestion in cases of flexion. He thought the influence of the sacro-uterine ligaments was overrated by Dr. Williams. It was rare to find them constrict the fundus in retroflexion, and rare to find the uterus go up suddenly on reposition, as ought to occur in such cases. There is often evidence of congestion in excessive menstruation in cases of retroflexion, and the symptoms were often relieved by a pessary. In most cases the utero-sacral ligaments had only a minor effect; the stretching and twisting of the broad ligaments, and possibly the flexion itself, ought to be considered. The transverse arrangement of the vessels might be expected to prevent congestion everywhere except opposite the bend. He thought that in the section of the fœtal uterus shown by the author he saw some longitudinal as well as transverse vessels. In procidentia, as the cervix was extruded it became congested, even without any apparent constriction at the vulva. He did not agree with Dr. Herman that the frequent occurrence of anteflexion without congestion proved that flexion could have nothing to do with congestion. Acquired flexion might possibly produce congestion for a time, but the circulation would soon re-establish itself.—Dr. CHAMPNEYS pointed out that the arrangement of the vessels in the uterus was very similar to that in the intestines, which the uteri of many animals greatly resembled. The intestines were marked by acute flexions every few inches, but no harm to the circulation resulted from them in the case of the intestines, and it was unlikely that the result would be different in the case of the uterus. He thought that congestion was often diagnosed on insufficient grounds, and, indeed, in most cases congestion of the fundus was impossible of verification. Careful examinations made him think that the influence of the sacro-uterine ligaments was rare. In cases of retroflexion with profuse menstruation the influence of descent had to be remembered; it had repeatedly happened to him to lift up the fundus with a pessary, to find the symptoms relieved, and the uterus, high up, indeed, but as much flexed as ever.—Dr. AUST LAWRENCE (Clifton) said that very few cases of displacement were uncomplicated. He could only remember three such cases of retroflexion of this nature; all these went to prove that the displacement was competent to produce profuse menstruation, and therefore congestion. The first case was that of a single woman aged twenty-two, who was thrown from a cart; the next period was excessive, and he found acute retroflexion and incarceration by the sacro-uterine ligaments. It was replaced, and the bleeding ceased, the next period being normal. The other two cases were similar, with the exception of incarceration.—Dr. MURRAY agreed with Dr. Williams; although there are cases of congestion with flexion, there are many flexions without congestion. Menorrhagia may occur without flexion. Prolapse of the uterus would tend to produce congestion by impeding the circulation.—Dr. W. DUNCAN thought that congestion of a retroflexed uterus was not un-

commonly due to incarceration by the sacro-uterine ligaments, especially when thickened and shortened by inflammation. Thickening of the posterior cervical lip did not prove an impediment to circulation by flexion, as it was common without any flexion. Many cases of congestion in flexed uteri can be cured without treating the flexion.—Dr. WILLIAMS regretted that there had been no discussion on the doctrine enunciated in the paper that the whole thickness of the uterus within the connective tissue in which the vessels ramify (described above), should be considered to be mucous membrane, this connective tissue being the submucous coat. The muscular layers inside this, therefore, are really the "muscularis mucosæ," into which the uterine glands penetrate. The submucous coat is plainly seen in the fœtus, and also in some conditions in the adult, as the specimens shown illustrate. Dr. Hewitt's illustration from a flexed limb presents no analogy; a flexed finger would have been more apposite, and a finger is often permanently flexed, but no congestion results. Dr. Hewitt believes that congestion will not result from a temporary but from a permanent flexion; Dr. Galabin believes exactly the opposite. Dr. Hewitt's argument from clinical observation requires careful examination of crucial cases, disturbing influences being excluded, such as pregnancy, which is itself capable of producing congestion. Only cases where no pregnancy or disease has ever occurred will serve as arguments. In such cases Dr. Williams had never found congestion follow flexion. Dr. Aust Lawrence's first case confirmed the views stated in the paper; the other cases were not related in sufficient detail to use as arguments. In some cases replacement of the uterus arrests, in others it produces, hæmorrhage; indeed, as Dr. Robert Lee pointed out, a simple vaginal examination in a healthy woman may produce hæmorrhage.

Note on a Case of Absence of the Uterus and Occlusion of the Vagina, by Dr. BOUSQUET (Marseilles).—The patient, aged twenty, had never menstruated, but had suffered from hæmorrhages at the usual periods, sometimes from the rectum, sometimes from the gums, lasting four or five days. When seen, the hæmorrhage had lasted two days; the gums were swollen, painful, and bled on touch. The hymen was very hard; from a small hole in its centre flowed whitish mucus. The hole was enlarged upwards and the finger inserted, but only penetrated two centimetres, where it met a second membrane, tympanitic on percussion. This was incised and the finger penetrated three centimetres further, but no cervix could be felt. Combined examination by vagina and rectum discovered no uterus. The author then cited a very similar case of Dr. John Clarke's in St. George's Hospital, followed by an autopsy in which ecchymoses were found in the skin, pleuræ, and pericardium, together with old endocarditis. The author regarded these cases as proof that the ovarian nisus is sufficient to cause vicarious menstruation when the natural channel is absent.—Dr. JOHN WILLIAMS did not think either of the cases were examples of vicarious menstruation, but of purpura in women without uteri. Histories of periodical bleedings or periodical fits were to be received with much caution. He had watched several such cases in hospital for four or six weeks, and found either no bleeding or fits, or bleeding or fits at irregular intervals.—Dr. ROUTH related a case in which the vagina was too short, and the introduction of the whole hand into the rectum proved the absence of a uterus. This was the only certain way of making the diagnosis. He agreed with Dr. Williams that the case was one of purpura in a malformed woman, rather than one of vicarious menstruation.—Dr. CHAMPNEYS said that women were apt to attribute any unusual hæmorrhages, whether with amenorrhœa or not, to some menstrual influence. It was his habit to make such patients keep a diary of their hæmorrhages and monthly periods. Such an exercise was often sufficient to effect a cure, and in his experience it had invariably sufficed to explode the theory of vicarious menstruation. He agreed with the former speakers as to the nature of this case.—Dr. AMAND ROUTH related the case of three sisters, aged twenty-five, twenty-two, and twenty, who had never menstruated. In the two younger the vagina was only two inches long; in one, recto-abdominal examination proved the absence of uterus and ovaries, in the other the uterus was a nodule the size of a filbert. There was no vicarious menstruation. The breasts and pudenda were childlike. A younger sister, aged seventeen, was quite healthy and menstruated regularly. All the three sisters were very anæmic, and were said to be consumptive.

ACADEMY OF MEDICINE IN IRELAND.

AT a meeting of the Pathological Section on February 13th, Mr. WHEELER read notes of a case of Gangrene of the Leg and Occlusion of the Popliteal and Tibial Veins in a man aged forty-six, of intemperate habits, who had twisted his leg whilst wrestling. When admitted to hospital the leg was swollen, hot, much discoloured, and with large sanguineous bullæ. He was quite free from pain. The specimen exhibited showed well-formed thrombi occluding the interior and posterior tibial veins, there being the several example of the "obliterating," the "valvular," and the "parietals thrombus; the wall of the vein in the first case being much thinned. Allusion was made to some of the recent theories of coagulation of blood.—The PRESIDENT remarked that the specimens being so dry, it was impossible to tell whether or not there had been any inflammation, but his intemperate habits and the bruise or twist went a long way to explained what occurred.—Dr. M'ARDLE said the twist would have sufficed to tear the inner coat of the vein, which would have led to the formation of a clot sufficient to cause occlusion.

Mr. BROOMFIELD exhibited and explained a specimen of Endocardial Concretion which was taken from an old woman aged seventy-eight. Being a dissecting-room specimen, he had no history of the case. The specimen was of a calcareous character and interesting from its exaggeration, extending round four-fifths of the mitral orifice and running three-quarters of an inch into the ventricular wall. At one point there was complete rigidity. The endothelial lining was perfectly healthy, and the valves were comparatively healthy. It was curious that such a calcareous zone should have formed round the valves without implicating them or causing incompetence. There was no appearance of any other cardiac lesion.

Dr. M. A. BOYD exhibited a Colon removed from a man aged thirty, who died in the Mater Misericordiæ Hospital with all the symptoms of tropical dysentery of a month's duration, having had the usual fetid stools, containing mucus, blood, and shreds of lymph and mucous membrane, with most distressing tenesmus; a dry, brown tongue, dryness of the throat and difficulty of swallowing, vomiting, and hiccough. The temperature throughout, except in the beginning, when the attack came on with shivering and hot skin, was either normal or subnormal. There was tenderness over the liver; no enlargement of spleen and no peritonitis. The descending colon could be felt through the abdominal wall, round, resisting, and tender. The autopsy revealed not ulceration of rectum and colon, but general thickening of the mucous coat of the colon throughout, with exudation upon it of an adventitious lymphy membrane. From the close resemblance of the symptoms to dysentery, many of the so-called cases of dysentery were in reality cases of croupy or diphtheritic disease of the colon.—The PRESIDENT regarded the specimen as a good example of diphtheritic enteritis. There was an absence from it of the fetor which was characteristic of dysentery. Sometimes casts of the entire bowel formed by the membrane were passed.—Dr. LENTAIGNE inquired if there was much superficial tenderness, and if any member of the man's family had similarly suffered.—Dr. HENRY KENNEDY, referring to his extensive opportunities of seeing cases of dysentery in 1847-48, said he had seen the whole bowel from the stomach to the rectum covered with croupy exudations, giving rise to symptoms analogous to those produced by ulceration. A physician to the Queen, who had published an account of a violent epidemic of dysentery in Millbank prison, had recommended mercury as a most effectual remedy.—Dr. BOYD, in reply, said tenderness of the abdomen was absent, except along the descending colon. The family history was good, all the patient's family being healthy.

Dr. LENTAIGNE exhibited an example of Aneurysm at the Base of the Brain, which was taken from a woman who, whilst putting a postage stamp which she had just bought on a letter, fell dead in the shop, as if struck by lightning. Up to the time of her death she had been apparently in perfect health. On post-mortem examination he found a large quantity of blood, effused at the base of the brain, which had come from an aneurysm about the size of a pea, formed in the middle cerebral artery at its junction with the posterior. The artery was split open with a large rent. There was no disease elsewhere, save that the kidneys were small and

contracted. Almost all the vessels of the brain were atheromatous, but the aorta was perfectly free from atheroma. A great deal of blood was wedged in below the medulla and spinal cord. The stomach was full of tea and undigested potatoes.—The PRESIDENT observed that the compression of the medulla by the effused blood was no doubt the cause of death

MR. ABRAHAM read a paper for Dr. NIXON on Pericarditis in a Horse, showing a specimen. The principal features were enormous hypertrophy and an extraordinarily extensive fibrinous exudation covering the whole pericardial surface. The usual weight of the horse's heart was 6 or 7 lb., but this specimen weighed 21 lb. The notes of the case were taken by Mr. J. Kenny, V.S., under whose care the horse had been for pleuro-pneumonia, which had yielded to treatment. A week after the animal was brought back with high pulse and friction-sounds over the heart, subsequently becoming dull. At the post-mortem examination four gallons of yellow fluid were obtained from the pericardium. The hypertrophy of the heart was of long standing, and caused chiefly by the heavy work which the animal had to perform. The pericarditis appeared to be secondary to the pleuro-pneumonia. The immediate cause of death was the enormous pericardial effusion.

After a short discussion the section adjourned.

The opening meeting of the Sub-section of Anatomy and Physiology was held on February 19th, when the President, Dr. D. J. Cunningham, expressed his sense of the honour done him in electing him to the chair for the session; an honour which he prized highly, not only in being considered worthy of succeeding such men as Dr. Macalister and Dr. Purser, but also on account of the great interest which he had all along taken in this department of the Academy.

MR. BROOMFIELD exhibited his patent Eustachian valve, also a model for showing to a class the changes in the crystalline lens during accommodation.

DR. BENNETT exhibited a facile method of demonstrating Alternation of the Sectors of the Crystalline Lens of the Eye to a class by injecting ether into the posterior side of the capsule of lens, or between the vitreous humour and retina, a small quantity of mercury which formed a bright reflecting surface, the shape of which depended on the surrounding tissues. The results obtained by the mirror posterior to the vitreous humour appeared to give the best results. He stated that for a successful demonstration an eye not too fresh and a top light are desirable.

MR. M'ARDLE read a paper on a case of Anomaly of the Arch of the Aorta. The branches derived from the transverse portion from right to left were: right carotid, left carotid, left vertebral, left subclavian, and right subclavian. The only ones having a peculiar course were the right carotid and right subclavian. The former at its origin was somewhat to the left of the trachea. After ascending for half an inch it passed directly to the right, in front of the sixth and seventh rings of the trachea, and then upwards on the right side of that structure. The subclavian came off from the posterior aspect of the arch on a level with the remains of the ductus arteriosus; thence it passed in from off the second and third dorsal vertebræ, and behind the trachea and œsophagus, so that these structures were compressed between it and the foregoing vessel. The only other peculiarity of this trunk was its cone-shaped origin, where it was at least half as large as the aorta. It diminished to the normal size before giving off a single branch.—The PRESIDENT said the case which Mr. M'Ardle had so well described was one of the commoner varieties met with in the dissecting-room of the anomalous arrangement of the aortic branches. It was one of the most interesting of all the anomalies, because at first sight it appeared to be very difficult of explanation. The difficulty, however, at once disappeared on close examination. It had been shown lately that the anomaly was associated with the transference or transposition to the right side of the thoracic duct. This was explained by supposing that the thoracic duct, like the aorta, was laid down in the form of two lateral tubes, which afterwards fuse. It was interesting to notice the relation of the laryngeal nerve, because the fourth arch, counting from above, was obliterated, and therefore it was not recurrent at all, having nothing to hook round. There were about five cases on record of the transference of the thoracic duct to the right side. These were given by Drs. Crookshank, M'Donnell, Brown, and Arthur Thomson of Edinburgh.

DR. BROOKS gave a description of an Anomalous Coronary Branch arising from the Pulmonary Artery. The case occurred in an old female subject in the dissecting-room of Trinity College, Dublin. The abnormal branch arose from the left anterior sinus of Valsalva of the pulmonary artery; it was rather under an eighth of an inch in diameter, and its branches ramified chiefly on the infundibulum of the right ventricle, a few small ones supplying the coats of the pulmonary artery. Both the normal coronary arteries were present, and were rather large.—Dr. PURSER observed that as there was free anastomosis it must have carried arterial blood, and must have acted as a vein. The blood must have flowed from the point of high to the point of low pressure.—Dr. BROOKS, in reply, said the anastomosis was tolerably defined in one part. He had no doubt some of the arterial blood must have travelled on account of the high pressure. Still the communication did not seem to be sufficiently free for the whole of the blood to go that way.

The PRESIDENT communicated a paper which he received from Professor SHEPHERD, of Gill College, Montreal, on Musculus Sternalis in an Anencephalous Fœtus. In six such specimens Professor Shepherd had found the anomalous muscle, and in five of these he had been able to make out its nervous supply to be the same as that of the pectoral group of muscles.

DR. BROOKS related a case of the Vena Azygos Major ascending on the Left Side, and discussed the bearing of this Anomaly on the Development of the Azygos Bloodvessels. It occurred in a male subject, and appeared to be a transposition from right to left of the normal arrangement. The vein ascended on the left side of the bodies of the dorsal vertebræ, receiving the left intercostal veins, with the exception of the first and second, and also a branch from the right side, which entered it at the level of the eighth dorsal vertebra, and was formed by the confluence of two veins, which lay on the right side of the bodies of the vertebræ; the superior of these two received the sixth, seventh, and eighth intercostal veins; the inferior collected the blood from the ninth, tenth, and eleventh intercostal spaces. The left azygos thus formed attained to the size of an ordinary azygos major; it crossed the junction of the transverse and descending portions of the aortic arch, and opened into the left innominate vein. A small vein opened in the ordinary position of the (right) azygos major; it was formed by the confluence of four intercostal veins, but the trunk lay not in the ordinary position of the azygos major on the bodies of the vertebræ, but on the ribs external to the gangliated cord of the sympathetic. This peculiar position was interpreted as representing a larger portion of the posterior cardinal vein persisting than usual. A remarkable bend in the course of the left azygos, whereby a portion crossed the necks of the tenth and eleventh ribs, was explained in the same way. Reference was made to the symmetrical condition of the venæ azygos in the embryo as affording a ready explanation of the transposition—the right, instead of the left, azygos system having been broken up.—The PRESIDENT remarked that this anomaly was also of interest from a comparative anatomy point of view, because in some of the lower animals it was the normal arrangement for the vena azygos major to pass up the left side, the opposite to that in the human subject. In the sheep this was the case. In marsupials it sometimes chooses the one side and sometimes the other. The Tasmanian wolf was an example of its passing up the right side, as with ourselves.

The PRESIDENT gave a description of an Andaman Skeleton, and compared it with those of other races. He referred to the two elaborate papers which had been communicated by Professor Flower to the Anthropological Institute upon the osteology and affinities of the Andaman islanders, and showed how closely the skeleton in his possession bore out the many remarkable facts described by that author. He especially directed attention to the lower jaw, vertebral column, and the sternum. He compared the lower jaw with that of a European child of five years old, and showed how closely they resembled each other. In both the feebly marked chin, the poor development of the basal or subdental part of the body, the low ascending ramus, and shallow coronoid notch were very manifest. The cervical vertebræ were distinguished by their spinous processes exhibiting very little tendency to bifidity. The bodies of the lumbar vertebræ were not moulded in such a fashion as to give any assistance in the formation of the lumbar curve; in fact, the sum of their anterior measurements was considerably less than the sum of their posterior measurements. The sternum

was remarkable for its extreme narrowness, but this is a feature which the author considered might possibly be an individual peculiarity, as he had had no opportunity of examining this bone in other Andaman skeletons, and Professor Flower had not mentioned it in either of his papers. The author concluded by stating that Professor Flower had unquestionably put his finger upon the salient point in connexion with the Andaman skeleton when he called attention to the many infantile characters which it exhibited.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on March 12th.

Leucocythæmia.—Dr. DYSON introduced a patient with Splenic Leukæmia. He was about forty years of age, married, and a blade-forger. He says he was healthy up to his present illness. There was no history of alcoholism, syphilis, or ague. The illness commenced five months ago, with wasting, loss of strength and appetite. There was no pain, and no history of hæmorrhage. He lost 2 st. in weight. Since his admission to the public hospital there has been pyrexia, the temperature ranging from 99° to 102° F., and quick pulse. The abdomen is half filled with the enlarged spleen, which presents the usual characteristics. Bronchitis was present on admission, and there were profound anæmia and œdema of the legs. Systolic hæmic murmurs were heard at the base of the heart, and white corpuscles were greatly in excess in the blood; red, paler, and forming rouleaux imperfectly; also smaller corpuscles, very highly refractive and spheroidal. One observation of the urine gave in twenty-four hours 62 oz. and 446·4 grs. of urea; no albumen or sugar. The treatment pursued had been quinine, iron, and arsenic, internally, and the constant galvanic current externally.

Aortic Stenosis.—Dr. BANHAM introduced a boy aged eleven years, suffering from aortic stenosis. There was some hypertrophy of the left ventricle, and indeed the compensatory changes in the heart were complete, so that no cardiac symptoms were complained of. The chief peculiarity in the case was the exaggerated character of the systolic murmur and thrill, both of which had been noticed by the child's parents. The murmur could be heard not only all over the chest, but throughout the whole length of the spine and over the occipital bones, and also when the ear was withdrawn an inch or two from the front of the chest wall. The thrill, which was excessive over the upper part of the chest and in the large vessels, was recognised the moment the hand was placed on the boy's shoulder. There was no evidence of aortic dilatation, the second sound of the heart was not generally audible.

Epilepsy.—Dr. PORTER read a paper on Epilepsy. After reviewing briefly the theories which had been put forward to explain the phenomena of an epileptic fit, he quoted from notes of twenty cases which had come under his treatment among a total of 841 out-patients at the Sheffield Public Hospital and Dispensary last year. Of these, eleven were males and nine females; in three cases there was a family history of epilepsy, in two of insanity, and in four of other nervous disorders, making a total of nine out of twenty cases in which there might be inferred hereditary tendency to brain affections. The fits occurred for the first time, in a very large proportion of these cases, either between ten and twenty years of age, or after thirty. As the exciting cause, two cases were attributed to head injuries, four to sudden shock or mental troubles, one to onanism; two originated with pregnancy, one at the commencement of menstruation, and one at the menopause. In reference to the connexion between epilepsy and uterine neuroses, Dr. Porter referred to Prof. Charcot's description of so-called hystero-epilepsy, and contended that in those cases at all events in which the hysterical and epileptiform paroxysms occurred together, the epileptic characters were more simulated than real; he deprecated the use of the term "epilepsy" in the nomenclature of this class of affection. In six cases out of twenty Dr. Porter met with a distinct aura, and in four more there were distinct premonitory symptoms. In enumerating the drugs he had found most serviceable, he laid special stress on hydrobromic acid in drachm doses; sodium nitrite he considered a very dangerous drug, from what he had seen of it in epilepsy. Dr. Porter considered that the proposal to introduce such an operation as the ligature of the vertebral artery in epilepsy should be received with the greatest caution.

Reviews and Notices of Books.

The Local Government and Public Health Orders relating to Urban and Port Sanitary Authorities, &c. By R. CUNNINGHAM GLEN, Barrister-at-Law. London: Shaw and Sons.—It is well known that the Local Government Board have, in their Poor-law and sanitary capacity, issued a considerable number of orders, circulars, memoranda, and sets of instructions, and that a number of the former have the force of law; some also have been repealed or cancelled; and as regards others, it is not always easy to decide whether they are or are not the ones which remain in force. Under these circumstances, the issue by Mr. R. C. Glen of a volume containing all such valid documents, arranged in proper order and carefully indexed, supplies a real want, and the work cannot fail to be of considerable service. Every subject as to which orders have been issued will be found to be included, and some of the orders, such as those relating to the constitution, &c., of joint hospital boards, cannot, without a great deal of trouble to those seeking them, be found elsewhere than in such a volume. In short, as a work of reference Mr. Glen's book will doubtless find a place in the libraries of many who are engaged in administering sanitary and Poor-law matters in this country.

Eczema and its Management: a Practical Treatise based on the Study of Three Thousand Cases of the Disease. By L. DUNCAN BULKLEY, A.M., M.D., Physician to the New York Skin and Cancer Hospital, &c. Second Edition. New York: G. P. Putnam's Sons. London: J. and A. Churchill.—The perusal of the second edition of Dr. Bulkley's considerable work on Eczema shows that he has spared no pains to make his views quite clear, and the work generally a thoroughly practical one. The previous edition was received with much favour, and in this second issue the author, whilst not altering in any way the principles of theory or practice, has made considerable additions and revisions with excellent judgment. General practitioners, for whom the work is more especially intended, will find in it a clear and trustworthy guide in the treatment of a very common and often embarrassing disorder. We may mention that Dr. Bulkley's views closely correspond with those held by Wilson and Fox in this country.

The Hunterian Oration delivered at the Royal College of Surgeons of England, Feb. 14th, 1885. By JOHN MARSHALL, F.R.C.S., F.R.S., LL.D., Past President of the College. London: Smith, Elder, and Co. 1885.—Our readers are already familiar with Mr. Marshall's excellent Hunterian Oration, for it was published in full in our columns immediately after its delivery; but we are confident that they will welcome this reprint, especially as it is enriched by some useful references and notes. The Hunterian orator has a difficult task, for he addresses a critical audience familiar with the many excellent deliverances of past orators; but Mr. Marshall undoubtedly succeeded in imparting freshness to the theme in his discussion of the connexion between recent advances in surgical and histological knowledge and the views of John Hunter. Often as the Hunterian festival comes round, we feel afresh that the life and labours of this great father of scientific surgery are worthy of far more attention than they have yet received, and we welcome any addition to our knowledge of the man and his work.

The Asclepiad. No. 6, Vol. II.—Readers of the *Asclepiad* are now familiar with the general construction of this periodical, and we believe that not the least welcome feature is the account, always interesting and faithful, of some man of mark. The current number is rich in illustrations, and a portrait is introduced with the object of

adorning the biographical notice of the anatomist, Vesalius. In the Opuscula Practica Dr. Richardson brings forward a new remedial agent which he believes will play as useful a part in surgery as the ethylates and colloids have already done. This agent is oxalic ether, which is too heavy to be administered by inhalation, though it may be applied hypodermically. It coagulates the albuminoid structures and produces a "free and dry eschar," without any marked constitutional disturbance. It promises to be of service in the removal of morbid vascular growths. The other contents of this number are—the Hygienic Treatment of Pulmonary Consumption; Measures of Vital Tenacity; the Prescription for Alcohol in Disease, a chapter in which we find ourselves almost in complete accord with Dr. Richardson; Researches on Resuscitation from States of Suspended Life. Altogether the present number is a very good one.

Nature's Hygiene: a Systematic Manual of Natural Hygiene. Containing also an account of the Chemistry and Hygiene of the Eucalyptus and the Pine. By C. T. KINGZETT, F.I.C., F.C.S., late Member of Council, Institute of Chemistry of Great Britain and Ireland, &c. Second Edition. London: Baillière, Tindall, and Cox.—Mr. Kingzett, in his second edition, has revised and enlarged his interesting and useful book. He has now divided it into two parts, of which the first deals with general considerations, such as the chemistry of natural oxidation, theories of disease, water-supply, sewage-disposal, antiseptics, and the like; while the second is devoted to the branch of chemistry which the author has made peculiarly his own—namely, the oxidation of the essential oils, particularly those of the pine and the eucalyptus, and the efficacy of their products of oxidation as antiseptic agents. Naturally a considerable portion of this part of the book is given to the consideration of the "Sanitas" preparations invented, or we might more properly say discovered, by Mr. Kingzett, but the treatment throughout is strictly scientific, and there is no trace of the trade puff. There is, indeed, great scientific importance in the facts which Mr. Kingzett has brought to light in regard to the development of peroxide of hydrogen during the oxidation of essential oils. It explains the hygienic value of pine and eucalyptus forests, and, we may add, of "Sanitas," which now enjoys general favour as a disinfectant, safe, pleasant, and useful, although, perhaps, not very powerful.

Syllabus of Lectures on Physiology delivered at Guy's Hospital. By P. H. PYE-SMITH, B.A., M.D. Pp. 110. London: Churchill. 1885.—This little work contains a large amount of information admirably adapted for the students of Guy's Hospital in attendance on Dr. Pye-Smith's lectures, but of less value to those who are taught elsewhere; nevertheless, there is much that is suggestive not only to students, but to teachers. The text consists of a series of short notes such as a lecturer might bring into the lecture-room with him, or which an intelligent student might jot down, when studying his text-book, for the purpose of refreshing his memory. The notes do not, and are not intended to, give details, but simply supply headings which the student might advantageously think and write out at length. The diagrams, of which there are many, are quite original and well worthy of study.

Zigzag Ramblings. By R. T. MANSON, M.R.C.S.—This little volume consists of a republication of a series of papers contributed to the *Darlington Times*, and they well deserve the wider circulation they are likely to enjoy by being issued in a separate form. The book reminds one of Gilbert White's "Natural History of Selborne," containing as it does descriptive sketches of the physical aspects and features of Darlington and its vicinity, given in an easy and attractive style. To the residents of the locality, especially, the *brochure* cannot but prove an agreeable companion during a stroll along the hedgerows and through the lanes and copses of that part of the north of England. Familiar lessons in botany and geology, interspersed with entomological and meteorological facts and references, with the introduction here and there of quaint axioms and moral reflections, make up a very readable little book, which is worthy of a somewhat better dress than that in which it is presented to the public.

SUPPOSED POWER OF ACCOMMODATION IN AN APHAKIC EYE.

To the Editor of THE LANCET.

SIR,—I think that the facts reported in Mr. Bickerton's case, published in your issue of March 21st, can be explained without supposing that the eye possesses any power of accommodation. It is well known that the retinal images need not be formed with absolutely mathematical accuracy in order that vision may reach the standard which is usually accepted as the normal one; it is also an accepted fact that the larger the retinal image, the less do the circles of diffusion interfere with vision. A difficulty in choosing between lenses differing from each other by less than 1 D is, I should say, rather the rule in testing the distant vision of cataract patients after operation. In testing the near vision, also, there is always a range extending on either side of the point for which the glass employed adapts the eye, which extends, I believe, further on the proximal than on the distal side of that point. I have no precise data as to its extent, but am convinced that it usually comprises several inches. In the present instance, the refraction, being 10·5 D + 14 D, would adapt the eye for a point 11·3 in. from the glass; the range, therefore, was slight on the distal side, but reached 4·8 in. on the proximal.

I fail to understand Mr. Bickerton's meaning when he says that "on either side of our strictly mathematical focus for near objects (p.p.) there is a small range of space in which we can see." The *punctum proximum* (p.p.) is the point for which the eye is adapted when using its maximum accommodation; the range, therefore, on the distal side of this extends to the "far point" (p. r.)—i.e., in the normal eye to infinity. The range on the proximal side of p.p. is greater when, as in Mr. Bickerton's case, there is a lens before the eye, because the images are then somewhat larger. As long as the distance of the lens from the eye is insignificant as compared with the distance of the object, as is the case in distant vision, the difference in the size of the retinal images is inappreciable, but when the object is brought within a few inches it becomes considerable. I think that Mr. Bickerton fails to appreciate the fact that the power of reading 1 Jaeger at 9 in. does not indicate a very high degree of visual acuity. The height of the letters being 0·75 mm., they would have to be held at a distance of 16 in. to give the same size to the retinal image that occurs in seeing $\frac{1}{1}$. The really extraordinary point in Mr. Bickerton's case, as reported, is that his patient had a visual acuity which was double the normal standard. I have not referred to this earlier because I suspected the statement that vision was $\frac{2}{1}$ to be a misprint. If Mr. Bickerton really intended to convey this, the case is, as far as I know, unique; and it is to be hoped that he will publish further particulars in reference to it, stating particularly the exact height of the letters used, their exact distance from the eye, the number employed, and the number read correctly.

I am, Sir, yours truly,

Wimpole-street, March 23rd, 1885. W. ADAMS FROST.

P.S.—Since writing the above I have examined a patient, aged thirteen, on whom I operated, in January for lamellar cataract in one eye. With + 11 D the visual acuity is $\frac{2}{3}$. With + 15 D he reads 1 Jaeger over a range extending from 11·4 in. to 5·75 in. (measuring from the lens). Of course he reads best at the distance for which the glass adapts the eye—viz., 10 in. This, for some unexplained reason, was not the case with Mr. Bickerton's patient. I do not think that this range is in the least usual; were it so, many patients would in some respects be better off before the operation than after the most brilliant result.

THE LANCET.

LONDON: SATURDAY, APRIL 25, 1885.

A VERY important financial experiment is at this moment threatening, the effect of which, if it were successfully carried out, would materially tell upon the profession of medicine. It is said that a Life Assurance Company is about to be formed the leading feature of which is to be that all necessity for a medical examination of the insured shall be dispensed with. The statement of the person about to insure will be put to a severe test. He or she will have to affirm the state of health, at the moment of commencing the contract, on a form so explicit and binding that anyone who intentionally deceives will inevitably have to forfeit all benefit. It is thought, we must assume, that each insurer will himself take care, by a medical examination, that he is certain before he insures; and that in this way the usual fee paid by the companies for a private medical report, as well as the fee paid to the medical officers of companies, will be entirely saved.

There is about this proposed experiment just sufficient plausibility to induce many men to give it a trial. There is no part of human action so truly and so rashly experimental as the financial. Men of business, as they are called—those who pride themselves on being called men of business, and who chide everybody who does not come up to their rigid standard of business ability and punctuality,—are often amongst the first to enter on a speculation which to them seems certain, because, on the surface, it presents no irregularities which they care for. It is well known, too, that on all insurance boards there are directors who are ready to accept every case that comes before them, and who would, on the doctrine of chances, accept every case, barring those which were self-condemned, if their more cautious colleagues did not keep them in check. It is therefore anticipated that a sufficient number of capitalists may be found to embark on the new project, and, "throwing physic to the dogs" in the most open fashion, take the risks of life against money into their own hands.

There is yet another reason for supposing that this scheme may for a time float. It is well known that of late years the existing companies have one and all, as if by unconscious unity of action, become more and more particular in their selection of lives. There exists, as a consequence, at the present time an enormous uninsured community, the members of which have tried to insure and have failed to carry out their wishes. These still wish to insure, and a new company starting, as it were for their benefit, would find a constituency ready to its hand. At first, too, the scheme might seem to be financially sound, and for one or two years a fair balance of profits might reward the enterprise.

It is well to take a calm survey of all these matters, and so, from its very inception, look the project fairly in the face. It is well, also, on the principle "forewarned, forearmed," to endeavour to detect what fallacies lie at the root of the new proposal. There are so many fallacies that we have no space in one article of this kind to bring even a moiety of them forward; but one or two should be named at once. It would, then, be a fallacy to assume that the design could be possibly successful with any capital that is at present represented by even the richest of the existing assurance offices. If all the companies were to club together into one great society, we think it doubtful if the plan would or could, in the long run, succeed. The value of medical examinations and of medical services does not rest on rough-and-ready statements as to the general health of would-be insurers, but on those refinements of examination which the people in general do not even think of. On the one hand, there are numbers of nervous people who imagine they are about to die, or, at best, will not live long, though they have little organically wrong with them, but who, if they were left to themselves, would never insure in any company to which they had to make a solemn declaration of health. On the other hand, there are multitudes who are ready at any moment to insure, and, disbelieving all statement as to their danger, would insure at once, if they had the power to do so, with nothing but their own evidence to help them into the insurance. Broadly we might divide all who insure into these two classes, and it is in regard to them both in this broad or general sense that the profession comes in most usefully for the protection of certain of them, and for the protection and advantage of all the companies. The doctor, in fact, as things now are, is the man who insures the mere nervous insurer, while he is the man who does not insure the bad reckless insurer, who at all risks would offer himself if he knew that he must be accepted. This point in favour of the present system carries with it in practice the greatest confidence in those offices which maintain the principle of selection of the fittest most determinately. An office that has the credit, or discredit, of accepting all fish that comes into its net is the office most distrusted. Such an office has been, as a general rule, the office that has most frequently failed; and where it has tried the plan and found it wanting, it has been the one which has had most trouble in disposing of its policies and in freeing itself from its troubles.

We content ourselves at this stage with what we have said above. We have given the profession the earliest intimation of a project which affects its honour, its integrity, and its interests. We have indicated the conditions under which the project may find means to offer itself for trial upon the public, and we have noticed the first grounds on which the project is likely to fail. For whatever else may come of the design we shall watch and wait.

"WHAT is the meaning of this mysterious dispute between the coroner and the doctors? It has been going on, as occasional indications have shown, for a long time—a sort of smouldering fire, sparks glowing here and there in a heap of wood ashes. Yesterday it broke out in a blaze in the coroner's court, and flamed so fiercely that we almost wonder nobody sent for the fire-engines. What does it all mean? There is something about post-mortem examinations—so much we know; and something about fees; and something, too, about hospital doctors, between whom and the coroner there appears to be a deadly feud of some unexplained character." With these words the *Birmingham*

Daily Post, one of the best conducted and most influential provincial journals, commences one of its leading articles on the 18th inst.

The mere fact that in so populous and important a community as Birmingham the relations of Her Majesty's coroner and the medical profession are, on good authority, said to be in a state of chronic conflict, points to a condition of things deeply affecting the public interest. So grave is the actual and possible issue, that we have instituted careful inquiries on the subject.

The office of coroner in Birmingham has a remarkable history, only one vacancy having occurred in it in something more than half a century. For upwards of forty years Dr. JOHN BIRT DAVIES, then senior physician to the Queen's Hospital, was the Birmingham coroner; leaving a record of enlightened and laborious industry almost unparalleled. He only retired on reaching fourscore years; and his merits were somewhat lightly passed over, in the heat of the discussion which attended the appointment of his successor. The relative claims of medical and legal coroners were not seriously discussed, and the Town Council of Birmingham, with whom the appointment rested, decided to bestow it on a distinguished member of their own body, Mr. Alderman HAWKES, a solicitor in leading practice, who had twenty years previously filled the office of Mayor, and had given abundant proof of intellectual attainment and public spirit. He had not long been in office before he instituted two most important and beneficial reforms—the establishment of public mortuaries, and of a central coroner's court, where inquests have ever since been held, instead of at public-houses, as was previously the practice. Unfortunately, at a very early stage in his new career, matters did not run smoothly between the coroner and some of the members of the medical profession, especially so in the case of juniors on the resident staffs of the local hospitals. The sore has not healed with friction; and the contest of the other day appears to have been a test battle between the coroner and a junior of exceptionally high qualification, so placed as to give him apparently some technical advantage over paid residents, who, one after the other, have had to succumb. Dr. WILLIAM ARTHUR FOXWELL, the gentleman in question, having held the offices of pathologist and resident physician to the General Hospital, was recently raised by the committee of governors to the position of assistant physician, and is now in practice as a physician in Birmingham. Under these circumstances he seems to have been under the impression that, in appearing before the coroner, he was no longer compelled to give unpaid evidence, as he was, by law, during his residence in the hospital. When called by the coroner to state the cause of death, Dr. FOXWELL asked for his fee, whereupon an altercation ensued, which we summarise from *Aris's Birmingham Gazette* of the 18th inst., the report in which is in substantial agreement with those of the other localpapers:—

"Dr. Foxwell asked for his fee, and said he was not now on the resident staff.—Mr. Hawkes: Do you decline to give evidence?—Dr. Foxwell: I am not resident in the hospital.—Mr. Hawkes: I ask you again, do you decline to give evidence?—Dr. Foxwell: I am not now resident in the hospital. I have travelled all the way from Alvechurch to give evidence at this inquest, and think my expenses should be paid."

If in expressing this opinion the physician was in error, it was open to the coroner to correct him; and everyone who frequents the superior courts knows with how much kindliness and suavity judges always direct professional juniors, whether in their own or the medical profession. But this seems to have been an occasion for severity and not suavity.

"The coroner then called upon Inspector Willis to prove that he served a summons upon Dr. Foxwell at the General Hospital to give evidence at the inquest.—Mr. Hawkes (handing Inspector Willis a paper): Is that my precept?—Inspector Willis: It is, sir.—Mr. Hawkes: Does it include the name of Arthur Foxwell, assistant-physician at the General Hospital.—Inspector Willis: It does, sir.—Did you serve a summons on the doctor?—I did, sir. On Wednesday afternoon last I received the precept, and I served the summons personally.—What did he say?—He said he was resigning his office the following day, but he would attend."

It was surely rather early to call in the police inspector; but Dr. FOXWELL preserved his equanimity, and requested to be allowed to make a remark. So reasonable a request, if met in the same spirit, might have put an end to the difficulty, but the coroner seems to have considered that his court was not the place for explanations.

"Mr. Hawkes: You may make any remark you like before the Queen's Bench.—Dr. Foxwell: The statement is not correct.—Mr. Hawkes then asked Inspector Willis to call upon 'Arthur Foxwell to come forth and save his peril.'—Inspector Willis did so in a loud voice three times.—Dr. Foxwell: The officer did not serve me as stated."

Apart altogether from the merits of the question immediately at issue, it surely was an extraordinary proceeding to meet a physician's request for permission to make a remark by threatening him with the Court of Queen's Bench, and directing a police inspector to call upon him in open court, while he stood there, "to come forth and save his peril." The coroner probably felt that the witness should have stated his objection before he was sworn, and that once he had taken the oath he was bound to answer to the best of his knowledge, protecting himself if he chose by submitting under protest; but the fee question having become the subject of a long altercation, this point was reached.

"Mr. Hawkes: Is your objection to state the cause of death because you have not had a fee for the post-mortem examination?—Witness; I have no authority to do so.—Mr. Hawkes: I must commit you for wilful contempt of the authority of the Queen and this court.—Dr. Foxwell: I am sorry you take things in this way.—Mr. Hawkes (sternly): Officer, take this man in charge.—Dr. Foxwell (wavering): Am I to be detained?—Mr. Hawkes: Certainly. You will be sent to Winson Green [the common gaol].—Dr. Foxwell: Have I no right to speak to anyone outside?—Mr. Hawkes: You can speak to whom you like, so long as you remain in the custody of these officers.—Dr. Foxwell: Can I not obtain legal advice on the matter?—Mr. Hawkes: You can send for a lawyer if you like. I shall be most happy to see him. You must not begin to make extortions in Birmingham merely because you have been practising in London. [To the jury:] If I owed him a guinea he could sue me in the County Court for the money. Did you (the jury) ever see such a miserable exhibition as this on the part of an educated man in a struggle after a guinea. Thank heaven, he is not a Birmingham man."

Dr. FOXWELL interposed—"I beg your pardon, sir"; and, after a few more questions and answers, these followed:—

"Mr. Hawkes: Can you tell the jury the probable cause of death?—Dr. Foxwell: Yes; shock. I did not understand

what you meant; I could have told you that at any time.—Mr. Hawkes: The cause of death was shock?—Dr. Foxwell: No, sir; I did not say that. The "probable" cause of death was shock.—Mr. Hawkes (sarcastically): After half an hour's trouble we have got this much from the witness—that the probable cause of death was shock.—Dr. Foxwell: That is not——Mr. Hawkes: Pray don't interrupt, sir; don't interrupt me again.—Mr. Hawkes was proceeding in his remarks when Dr. Foxwell again interrupted.—Mr. Hawkes (to Sergeant Gosling): Remove this man from the court.—Dr. Foxwell: That evidence is worth nothing. Shock might be caused by anything.—Mr. Hawkes: Remove him; take him away. We will not be bothered with him any longer. I must resent these insults to the court from members of hospital staffs.—Dr. Foxwell: And I hope that the hospital staffs will resent the insults of the court.—Sergeant Gosling and Police-constable Twigg then escorted Dr. Foxwell to the door."

This is certainly one of the least creditable altercations we ever remember as having occurred in a coroner's court. Conceding that the Birmingham coroner may have been annoyed by the demeanour of the juniors at a particular hospital, it can scarcely be doubted that, on proper representations being made to its managing committee, they would have assisted Her Majesty's officer in the discharge of his highly important duties. But it is not easy to see how such an altercation as that above recorded can conduce to the protection of life or to the dignified administration of justice. An old legal practitioner may naturally have little sympathy with the aspirations and worldly inexperience of a distinguished young scientist, who, even if injudicious (we do not say he was so), yet did not deserve to be treated as a *quasi*-felon. Above all, it behoves legal coroners, if not exceptionally informed on medical matters, to be very careful to obtain accurate medical evidence, and to avoid anything approaching to a conflict with medical witnesses.

MR. MITCHELL BANKS read an important and valuable paper at the Medical Society on Monday last on the Treatment of Gangrenous Gut in the operation for Strangulated Hernia; and it was successful in initiating a good discussion. Many months ago Mr. BANKS was called upon to operate for a scrotal hernia which had been subjected to considerable violence by the patient's efforts to reduce it. The coverings were greatly swollen and livid in colour, and on opening the sac there was an escape of clot and bloody fluid, and a coil of gangrenous intestine was exposed. In view of the absence of putrid suppuration in the sac and of the good general condition of the patient, Mr. BANKS drew down the intestine until he exposed healthy bowel, and then proceeded to excise several inches of the gangrenous intestine with a wedge-shaped piece of mesentery, and to unite the cut ends of the bowel, which he finally returned within the abdomen. The man made a good recovery, and is now well and able to follow his occupation as a cook. This appears to be the first recorded case in which this operation has been successfully performed, and Mr. BANKS is to be warmly congratulated upon the success which rewarded his skill and care. This case formed an excellent text for a consideration of the line of treatment to be carried out in similar cases.

The patients who present themselves with gangrene of the strangulated bowel may be roughly grouped into three classes. There are, first of all, those who are in a moribund condition, dying from exhaustion consequent upon the unrelieved strangulation, the vomiting, &c. In these all the surgeon can do is to afford the relief that is to be obtained by a free incision into the bowel and an evacuation of its contents, with the removal of obstruction. In such cases no further treatment can for a moment be considered. Then there is the small class of cases, of which Mr. BANKS's is an instance, in which both the local and the general conditions are favourable, where the coverings of the hernia and the sac are not infiltrated with putrid serum or pus, and where the patient's strength is not exhausted by incessant vomiting. The conditions are favourable for recovery, and where assistants and the necessary appliances are at hand, the operation performed by Mr. BANKS is indicated. This procedure requires considerable time, and no little skill and care in the complete arrest of hæmorrhage from the divided vessels in the mesentery and in the bowel, and in the careful adjustment and closure of the bowel. A septic condition of the wound will also with almost absolute certainty be attended with a fatal result. The after-treatment requires to be conducted with the greatest care and judgment. Even under the most favourable circumstances, this operation will always involve considerable risk, and it is only the fact that it affords the quickest means of restoring the patient to the best possible condition that justifies the procedure. Between these extremes of cases are others in which the general condition is such as to admit of recovery if the obstruction be relieved, but in which both it and the local condition are such as not to admit of the resection and union of the bowel and its return within the abdomen. In these cases the practice of surgeons has varied, and it was Mr. BANKS's object to elicit opinion in such a manner as to make the practice more uniform. One course open—and it was strongly advocated by Mr. TREVES—is to excise the gangrenous bowel, and, gently drawing down the ends of the bowel, to unite them to the skin wound and make an artificial anus. Subsequently, when the conditions are all favourable to the operation, this anus can be excised, the ends of the bowel united, and the parts replaced within the abdomen. The argument in favour of this plan is that it at once removes the sphacelus and securely fixes the bowel to the skin, preventing its slipping back and causing fæcal extravasation. The subsequent resection of the anus is a much less dangerous operation than when performed primarily for the gangrene. On the other hand, it is alleged that when the dead bowel is freely incised the sphacelus very quickly melts down and separates; that the disturbances at the neck of the sac may be the means of allowing septic matter to pass into the peritoneal cavity; and, further, that the cutting off of the intestine, if done beyond the sphacelus, must be attended with hæmorrhage; while yet another objection to this plan arises in those cases where the extent of the gangrene is doubtful at the time of the operation.

The alternative plan is to make a free incision into the gangrenous bowel, to evacuate its contents and the fluids infiltrated in its walls, and to make a free passage for the contents of the bowel above, and, having done this, to leave the parts to nature. The slough is very quickly thrown off and a fæcal fistula remains. This may close spontane-

ously, or may be made to close by such a device as has been described and successfully practised by Mr. BANKS or by some similar means. Or the surgeon may subsequently resect this portion of bowel and restore the continuity of the bowel within the abdomen. The simplicity and success of this procedure will no doubt commend it to the majority of surgeons, and make it the usual course to be adopted in these cases. But in connexion with it the questions arise—whether the stricture should be divided, and whether it is well to draw down obviously healthy intestine into the neck of the sac. Each of these queries should, it would seem, be answered in the negative. The parts about the neck of the sac should be left as undisturbed as possible, for not only may the bowel be greatly thinned and weakened just where it has been nipped by the stricturing band, but the adhesions formed on its inner surface which shut out the peritoneal cavity from the wound may be broken through, and a path opened for the passage of septic matter into that serous sac. As Mr. BANKS rightly stated, septic poisoning, and not peritonitis, is *the* cause of death after operations for strangulated hernia; and in cases where the contents of the sac are septic, as they usually are in gangrene of the gut, no pains should be spared to preserve the adhesions which may have formed about the hernial ring. The surgeon will also, of course, take all the steps that seem to him advisable to cleanse the external wound, and to render the escape of the intestinal contents and effused fluids absolutely unimpeded. If the discussion of this subject result in rendering more certain and clear the lines of practice in this serious condition, which may arise suddenly in the practice of any surgeon, it will have been abundantly justified, and such we believe will be the case.

IT is, we think, imperatively necessary that attention should be at once directed to one most urgent matter in connexion with the public provision for the care and cure—or cure and care, as it ought to be—of the insane. The need of small hospitals for the prompt and active treatment of mental disease is very plain and very pressing. In 1877 the following plan was suggested:—To provide in every district a hospital, properly so called, thoroughly furnished with all necessary appliances for the physical and moral treatment of insanity. Attached to this hospital, so far as the conduct of its general arrangements is concerned, to construct an institution—or if necessary more than one—to which patients not either requiring or likely to be benefited by active personal treatment, but still needing medical care, may be removed when in the course of each individual case it becomes apparent that this transfer will not prejudice the final chances of recovery. In connexion with the workhouse, or in some appropriate institution—for example, a "workhouse asylum"—to provide suitable wards for the senile and infirm, whose recovery is impossible, and who tarry only for death. It was contended that this threefold system being efficiently organised, the necessary circulation of cases might be readily maintained without either indefinitely multiplying costly buildings, or allowing the curative establishment to become blocked against recent and curable cases by the stagnation of chronic cases. There would, moreover be this great advantage in the plan suggested—the capacity of the hospitals required in any district could be determined, not on a vague conjecture as to the probable rate of increase in the total number of pauper lunatics, but upon the more definite, and though neglected not impracticable, basis of the number of persons *becoming insane*. This general scheme was then worked out in detail from the statistics available as follows:—In Middlesex the admissions to the asylums at Hanwell and Colney Hatch during the year 1875 amounted to 1054. The discharges and deaths in the same year were 1044. It was estimated that about 30 per cent. of these case-endings, as they may be called, either by removal or death, occurred *within six months of their admission*. This is a most important consideration. The average number resident in the Middlesex county asylums for the period was 3906, and it was calculated that the actual accommodation required for *new*—that is, recent—cases would not exceed 1000 beds for the whole county. The rest of the accommodation provided was, in fact, devoted to the *care* of the insane, as distinguished from their *cure*. In Surrey, the total admissions in 1875 at Wandsworth and Brookwood numbered 834. The discharges by death or recovery were 568, of which some 30 per cent. took place within six months. The average number resident in the two public asylums of Surrey at that time was 1699. A hospital with 600 beds would therefore, it was urged, suffice for the cure of insanity in that county. Some addition to these computations was made for the new cases sent direct to licensed houses, and then the general inference was drawn thus: One curative establishment—or, better still, two—in Middlesex and one in Surrey, not exceeding the manageable proportion of 600 beds, with an ample medical staff and a sufficiently large number of attendants, would do more to keep down insanity *by curing the highest proportion of curable cases* than the most energetic and skilful use of the machinery at present employed could accomplish. In these small curative establishments it would be possible to make the treatment of each patient an object of special care. The progress of the malady might be watched, the exhibition of appropriate remedies at specific periods would be possible, and *the same clinical observation and research might be brought to bear on the work of cure which are now practicable only in hospitals.*

We reproduce this proposal as meeting the full requirements of the case, and affording an opportunity for the solution of the great difficulty of the moment with regard to the temporary custody of those who are alleged to be insane, but whose actual condition is doubtful. At each of the hospitals provided there would be receiving wards, and to these magistrates might remand cases for observation Attached to such hospitals, also, there would be wards for sleeping purposes only, allowing patients who were sufficiently recovered to "work for their living" to remain under supervision for awhile, going to their homes by day and returning at night, until they were quite fit to be discharged. "Out-patient" departments also would be practicable. In short, there would be the nucleus of a complete development of the hospital system with facilities for the clinical pursuit of mental disease by students of medicine; the net results being to place disease of the mind, so-called, on a footing of equality with disease of the body. This would at once bring

the light of day to bear strongly on the subject of insanity and on the care of the insane. We again commend the consideration of this scheme in its entirety to the attention of the Legislature and the profession.

AT a recent meeting of the Obstetrical Society of London Dr. JOHN WILLIAMS related his researches on the circulation in the uterus. Briefly told, the arrangement of the vessels is the following: The ovarian and uterine arteries run along the sides of the uterus and give off numerous branches, which proceed horizontally inwards and form circles round the organ; from these vessels run towards the uterine cavity in a direction perpendicular to the surface. It results from this that each portion of the uterus has its blood supply secured to it at its own level, and is not dependent upon any segment above or below it. The paper was illustrated by numerous specimens of injected uteri, both fœtal and adult. The arrangement of the veins is similar, and secures a free return of blood; the venous anastomoses of the veins outside the uterus are numerous and free, and it is an almost everyday observation that the ovarian vessels may be tied without embarrassing the return of blood from the uterus in any serious or permanent manner. The paper enunciated new views as to the real nature of various layers in the uterus. According to Dr. WILLIAMS, the primary branches of the vessels run in a layer of connective tissue near the peritoneal surface, which is more plainly seen in the fœtus than in the adult, and is really the submucous layer, usually said to be absent. The muscular layer outside this, which is very thin, is the true muscular wall of the uterus, while the whole thickness within the submucous coat is the mucous coat, and the muscular layers in it, forming the chief thickness of the entire wall, constitute the "musculares mucosæ," into which the glands dip. The "mucous membrane" affected by the menstrual cycle is the "decidua," and is only a very small portion of the mucous coat. These observations derive additional force from a study of the uteri of many of the lower animals, which are thin. The chief practical importance of the paper, however, lies in the assertion of the author that a ligature may be tied completely round the uterus at any point above the vaginal injection without affecting the supply of blood either above or below, and that therefore flexions of the uterus can have no effect upon the blood supply, in the way of causing congestion. The mechanical theory of uterine pathology has been subjected to a series of searching scrutinies of late. The researches of VEDELER and HERMAN, already quoted in these columns, have shown that displacements are extremely common, and that their effect on the production of dysmenorrhœa and allied disorders can no longer be maintained. They are now subjected to another ordeal; it is here contended that flexion pure and simple cannot conceivably produce congestion. In the discussion which followed the paper, Dr. GRAILY HEWITT, the champion of the mechanical system, acknowledged that the vascular arrangements were probably competent to secure an equable supply and return of blood in temporary and slight cases, while in severe and sudden cases congestion was very likely to ensue. Dr. GALABIN subsequently took the exactly contrary view that although there might be some obstruction to the circulation at first, collateral circulation would probably soon equalise matters. Dr. HEWITT fell back on his personal experience of cases of anteflexion as well as retroflexion complicated by congestion. Associations of this sort require to be subjected to the most severe and sceptical criticism by the observers who make use of them as arguments. The sense of the meeting appeared to coincide with that of the writer of the paper, and to agree with him that it is still to be explained how a flexion of the uterus pure and simple can conceivably be a cause of congestion. Displacements appear to be getting at a discount. Judging from the results of debates on the subject, our rising teachers neither teach them nor believe in them. When the "spur at the angle of flexion" cannot be produced in the flesh when repeatedly asked for (though figured freely in text-books); when the idea of flexion has been divorced from that of dysmenorrhœa; when the circulation in the uterus is demonstrated, and a theory of the possibility of congestion being produced by flexion is not forthcoming in the face of actual specimens—what remains? We may at least hope that the rising generation will henceforth be fed with facts and allowed to judge for themselves.

Annotations.

"Ne quid nimis."

THE COUNCIL AND THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

WE understand that a meeting of the Committee of the Association of Fellows was held on Wednesday last, to consider the latest decision of the Council respecting the alterations proposed to be made in the College Charters. Great disappointment—to euphemise—is felt at the continued rejection of several of the fundamental recommendations of the Association, and at the resolution of the Council not to submit the draft of the new Charter to a general meeting of the Fellows and Members. Indeed a rumour is current that the Committee of the Association regard this decision as directly contrary to a general understanding with the deputation of the Association that such a meeting would be held. Steps are, we believe, about to be taken to arrange a programme and a plan of action which will enlist the sympathy and receive the joint support of the two Associations of Fellows and Members. There should be little difficulty in discovering a *modus vivendi* for the two Associations. If this can be accomplished, the speedy defeat and overthrow of the anti-reform league in the Council is certain. It is important that a combined course of action should, if possible, be agreed upon without delay. The annual election is rapidly approaching, and the Fellows will have an opportunity of giving practical effect to their convictions by refusing to re-elect those who are known to have resisted every movement for the reform of the Council, and only by attacking the strongest cases will the Fellows be able to break through the compact body of obstructives.

TESTIMONIAL TO MR. SHIRLEY MURPHY.

IT is with great pleasure we find that it has been decided to raise a testimonial to Mr. Shirley F. Murphy, late medical officer of health of St. Pancras. This gentleman has been compelled, out of self-respect and in the interest of the public, and particularly that portion of it most dependent on the conscientious and judicious discharge of duty by the sanitary authorities, to resign his office. Mr. Murphy has, during a

period of nearly seven years, displayed a self-sacrificing devotion in prosecuting with unusual zeal very difficult problems of sanitary reform, and always with unvaried success. His investigations into the epidemic of typhoid fever in St. Pancras were carried out with rare acumen and scientific precision; and it is not too much to say that probably some, at least, of those members of the vestry who have earned an unenviable notoriety for obstructing his researches owe their continued existence to his disinterested services. There can be no doubt that the widespread feeling of sympathy for Mr. Murphy that has burst forth in so many quarters will do much to prevent a recurrence of what may justly be termed a grave social evil, and will serve to accentuate the wisdom of the saying, "out of evil good shall come." It is not enough, however, to affirm a principle in order to secure its adoption and practice; and for this reason we heartily join in the hope that the intended testimonial may meet with ready and substantial support from the public and the medical profession. The object is a worthy one, and deserving of recognition and support. Mr. Murphy's resignation represents a cause that should not be allowed to fail at the instigation and action of those who prefer personal advancement to the national weal. Subscriptions may be sent to the treasurer; the secretaries, Mr. J. W. Gandar, 157, Camden-road, and Mr. J. A. Heaton, 8, St. Bartholomew's-road, N.; or any member of the executive committee, which is at present constituted as follows:—His Honor Judge Chalmers, Hon. Sec., London Fever Hospital; the Hon. Lady Henry Somerset, 16, Albert Mansions, S.W.; Dr. J. G. Glover, 33, Compton-terrace, Highbury, N.; Rev. Mark Wilks, 12, St. Bartholomew's-road, N.; J. H. Badcock, Esq., M.R.C.S., 126, Gower-street, W.C.; John Hamer, Esq., Hon. Sec., Mansion House Council on Dwellings of the Poor.

PARASITES OF THE DOG.

As the seasons come round various ideas as well as things crop up, and of late we have had a plentiful supply of parasitic scares. Last year we had the entozoa of the mackerel wherewith to frighten poor and uninstructed people. Not long before that we were warned of the danger of eating pike and other fish, it having been alleged that trichinæ were found in a jack caught in the harbour at Ostend. This year the scare concerns the dog; and since a F.R.S. lends his name to the movement, let us see what he states. As an anatomist dealing with the vertebrata Mr. Mivart's reputation stands high, but we are not aware that he has made a single experiment or contributed a solitary new fact in relation to the parasites of the dog. He tells us that the "eggs" of the Tænia cœnurus "pass into the sheep's blood." That is ridiculous. The eggs do not pass; but their contents, in the form of six-hooked embryos, having been liberated in the true or fourth stomach, bore their way into the organs of circulation, and are at length carried to the brain. This was experimentally proved by Küchenmeister. Mr. Mivart next tells us that the hydatid, or "bladder-worm stage of existence" of the Tænia echinococcus "is passed, *not in the body of any domestic animal*, but in that of man himself." The italics are ours. This is too bad. One would think Mr. Mivart had never dissected a pig, a sheep, or an ox, in which animals these hydatids are remarkably prevalent, much more so certainly than they are in man. There is not a veterinary surgeon of experience living who has not encountered them. No doubt in Iceland, Australia, and India they are more abundant than in this country. At the Health Exhibition last year Dr. Cobbold showed drawings illustrating the pathological changes produced in the lungs and liver of English sheep and swine, and perhaps it may interest Mr. Mivart's friends to know that one liver of a pig there drawn displayed several hundred of the bladder-worms which, he says, do "not live in the body of any domestic animal." They will also be further interested to learn that "six pigs of the same litter, four months old, were similarly affected, all of them having been sent to market and sold as food." In the shilling pamphlet on the Parasites of Meats, "issued by authority," and published by Messrs. Clowes and Sons, the whole subject in relation to infection is fully explained. Another kind of evidence will perhaps better show the misleading nature of Mr. Mivart's dictum. We allude to the evidence to be derived from statistics. By a report received from the executive commissariat officer at Mooltan, it appears that so far back as 1868, during a period of fifteen months, commencing in October, 2109 animals were slaughtered in the district for the purpose of supplying rations to our troops. Of these cattle no less than 899 were affected with hydatids—that is to say, with those bladder-worms which Mr. Mivart has the temerity to inform the public do not pass this stage of their existence in the body of any domestic animal! Sanitarians are greatly indebted to Dr. Cleghorn for publishing these statistics; and, now that we are on the subject, it may be added that the majority of the animals were affected in both liver and lungs. The cysts occupied the liver in 829 instances, and the lungs in 726 instances. The kidneys and spleen were infested in a few cases. In regard to the questionable practice of fondling pet dogs and allowing them to lick the hands and face, we are inclined to agree generally with Mr. Mivart. The act of licking, however, would not be likely to communicate tapeworm, as the readers of the letter in question might be led to suppose, but such action would in certain cases readily convey the germs or eggs of a totally distinct kind of entozoon, which the late Professor Frerichs showed to be very common in the human liver in Germany. We allude to the Pentastoma tænioides, better known in its larval stage as P. denticulatum. It is a comparatively harmless entozoon, but, as Dr. Landor has shown (*Berliner Klin. Wochenschrift*, 1878), it may prove fatal to man in the adult condition. It has also been known to prove destructive to the dog itself.

INDUSTRIAL INSURANCE.

THE abuse of what is known as industrial insurance, especially of infantile insurance, is effectively dealt with in a supplement to a Lecture on Life Assurance recently issued by Mr. Arthur J. Cook. The subject is one the importance of which can scarcely be insisted upon too often or too strongly, in order to secure the further legislative action which the recent notorious cases at Liverpool show to be imperatively necessary. The reckless competition among agents of rival companies and the manner of their remuneration have led to gambling in life policies, which obviously affords inducement and facility for the crimes brought home to the women Flannigan and Higgins. Mr. Cook, from knowledge personally acquired in many parts of the country, is assured "that tens of thousands of husbands have been insured by their wives for sums up to the limit for which a medical examination is not required." The proposal forms for membership of Industrial Companies and Burial Clubs contain certain questions which ought to be answered, and signed by the person whose life is to be insured. There is every reason to believe, however, that in a large proportion of cases the supposed signatures or marks of the husbands upon the proposal forms are those of the wives, when they have not been written by the agents themselves. However this may be, there is no disputing the fact that insuring lives without the knowledge of the insured is one cause of the recent great extension of industrial insurance business.

The system of industrial insurance, and the way it is worked by competing and often unscrupulous agents, calls for a Government inquiry, with a view to further legislation for the protection of the public. Although insurances made by persons having no interest in the life insured are null and void, it is evident that this enactment should be supplemented, as Mr. Cook suggests, by making the effecting of an insurance by an uninterested person a legal offence. The present competitive traffic in small policies constitutes a grave social danger, profitable as it unfortunately is to industrial companies and agents.

THE DIRECTOR OF PUBLIC PROSECUTIONS.

A DRAFT report has just been issued of regulations under the Prosecution of Offences Acts, 1879 and 1884. This is to be submitted to the Lord Chancellor and the Secretary of State for the Home Department for their approval. The codification of the regulations drawn up for the guidance of the Public Prosecutor will do much to remove the uncertainty that has hitherto prevailed with regard to that official's duties. We have several times had to call attention to the unsatisfactory way in which criminal investigations have been instituted and conducted, notably in the case of Messrs. Bower and Keates. It is to be hoped that the reforms now under consideration will entirely remove the opprobrium that has undeniably been thrown upon a very important judicial institution. The first clause of the draft regulations defines the cases in which it shall be the duty of the Director of Public Prosecutions to "institute, undertake, or carry on a criminal proceeding in respect of an offence. These are: (1) where the offence is punishable with death; (2) where the offence is of a class the prosecution of which has been undertaken by the Solicitor of the Treasury; (3) where an order is given to the Director by the Secretary of State or the Attorney-General; and (4) where it appears to the Director that the offence, or the circumstances of its commission, is or are of such a character that a prosecution in respect thereof is required in the public interest, and that owing to the importance or difficulty of the case, or to other circumstances, the action of the Director of Public Prosecutions is necessary to secure the due prosecution of the offender." It will be seen that, whilst the conditions under which the Public Prosecutor is to act are more or less closely defined, a very wide discretionary power will still be vested in him. The tenth and last clause, though a short one, will be received by the public and the profession with unqualified approval, seeing that it contains a guarantee against frivolous and vexatious actions, and neglect or misconstruction on the part of the Public Prosecutor. It runs as follows: "The action of the Director of Public Prosecutions shall in all matters, including the selection and instruction of counsel, be subject to the directions of the Attorney-General." So that in cases of difficulty or doubt the opinion and advice of the latter official can be sought, and he it is who will be to a great extent responsible for the proper carrying out of the regulations. Even where the interference of the Attorney-General is not required, the knowledge of the fact that the Public Prosecutor is subject to his directions and answerable to him for any action he may have taken on his own authority will serve as a wholesome check against irregular procedure. The second clause gives to the Public Prosecutor the power of directing investigations which in his opinion are necessary to secure the due prosecution of the offender. The third clause enables the Public Prosecutor, either on application or on his own initiative, to give such advice and assistance as he may deem requisite to clerks of justices of the peace, and to chief officers of police, &c. The fourth clause enacts that where a case has been reserved for the opinion of the High Court of Justice, and counsel has not been instructed for the prosecution, the Public Prosecutor shall, at his discretion, or on the fiat of the Attorney-General, issue such instruction. Clause 5 refers to the powers of the Public Prosecutor, as to authorising "the preparation of scientific evidence, the remuneration of scientific witnesses, the payment of extra fees to counsel, the preparation of plans and models, &c.," on the sanction of the Attorney-General. Clause 6 confers upon the Public Prosecutor the power to cause the chief officers of every police district to furnish him with such information as is required by the Prosecution of Offences Act, 1870 and 1884. Clause 7 relates to the production of documents and other things. Clause 8 provides the Public Prosecutor with the power of obtaining documents, &c., from clerks of justices of the peace, whenever he finds that actions or prosecutions which should have proceeded have been allowed to drop. Clause 9 bears on the employment and payment of solicitors engaged by the Director of Public Prosecutions. From a perusal of these proposed regulations, it will be found that an earnest endeavour has been made to put the appointment of Public Prosecutor on a creditable and well-defined basis, and to furnish the country with a judicial department worthy the name. It remains to be seen how far these principles will be exemplified in practice.

MULTIPLE XANTHOMA.

WE have been favoured by Dr. Hardaway with a reprint from the *St. Louis Courier of Medicine* of an account of an interesting case, in a man aged forty-four years, of multiple xanthoma, exhibiting the plane, tubercular, and tuberose varieties of the eruption. The lesions were perfectly symmetrical, except for a remarkable corymbose band on the right side of the trunk in the trajectory of some cutaneous nerves. Such an occurrence has been, hitherto, unrecorded, and was, possibly, determined by a zona. The eyelids, upper lip, chin, elbows, wrists, hands, nates, thighs, legs, feet, genitals, mouth, soft palate, and trachea were involved. The patient had an enlarged liver, and had been treated for chronic hepatitis. Jaundice of twelve years' standing had rendered the skin almost black, and the surface was much scratched and scarred from the intense pruritus ever present. The xanthoma had gradually evolved in the course of four years, and seems to have commenced in the gluteal region. There was a trace of sugar, but no albumen, in the urine. Dr. Hardaway suggests that xanthoma is a diathetic affection, and that jaundice, when it occurs, is secondary to an early xanthomatous implication of the liver.

SHORTCOMINGS OF THE FACTORIES ACT.

WHILE it is not to be expected that the business of factories and workshops will go on without a measure of danger from accident and illness, the last return presented to the Home Office on this subject shows that the minimum of avoidable mishap is still far from being attained. A large percentage of reported cases of accident are evidently due to carelessness on the part of employers and employed. Among these are such as arise from insufficient fencing of machinery, from hurry in piece-work, and from the regrettable practice of entrusting the cleaning of machinery to young boys or girls. A part of the report of special interest to the sanitarian is that which deals with the atmosphere of work-rooms. Interesting facts are communicated with respect to overcrowding, and the varieties of trade phthisis which are apt to follow the inhalation of many kinds of dust-laden air. Of equal or even greater public importance are the statements contained in this return with reference to the condition of the class known as "sweaters," who supply the market, particularly in the

clothing trade, with work done in their own homes. Accounts of the destitution prevailing in this class have found their way into the press in many recent publications respecting the state of the London poor. A house-to-house visitation by the Factory Act inspectors during 1884 has further proved the powerlessness of that Act either in controlling working customs or in improving unhealthy domestic surroundings. The Act, indeed, was not meant to extend to the above-named body of operatives. We find, accordingly, that of 1478 such workrooms visited by the inspectors, 734 were exempt from their jurisdiction in all respects, while 367 were equally free from their sanitary control, though subject to that of the local authorities. Those who have visited among the poor, professionally or otherwise, can best appreciate the meaning of these assertions, which not only signify that much unjust overwork continues to press where it can least be borne, but also indicate a serious public danger, for the clothes which are stitched in slums where infectious disease is rife are found a day or two later exposed as the ready-made goods of some fashionable tailor; and the same is true in principle of other kinds of merchandise. There are many who wish to see the Factory Act so amended and extended as to cover the needs of shop *employés*. The returns before us show that the real limit of the influence of that measure is coextensive with paid labour in almost every kind and degree of trade and manufacture, and such an extended application need not, we think, imply a too particular official interference.

COLOUR-BLINDNESS.

AN interesting and important report upon the tests for colour-blindness used in examining candidates for masters' and mates' certificates of competency in the British mercantile marine has just been presented to both Houses of Parliament. It has been drawn up by Mr. Thomas Gray, of the marine department of the Board of Trade, and deserves careful consideration. The colour test in examinations for masters' and mates' competency in the British mercantile marine was established by the Board of Trade in May, 1877; and since then all candidates for these posts have been compelled to pass a test examination as to their ability to distinguish black, white, red, green, yellow, and blue, which are the chief colours that enter into the combination of signals by day or night used at sea. It is singular, however, considering the magnitude of the interests involved, the immense value of the property in jeopardy, to say nothing of the numerous lives that are yearly lost by collisions and by shipwrecks which might well be avoided, supposing them to be, as they unquestionably are, due in many instances to colour-blindness, that these tests have not been generally insisted on, not only for officers, but for men who are on the look-out; yet Mr. Gray states that he has never yet heard that a shipowner, or even a master of a ship, applies the colour test to men employed as A.B.'s. It may reasonably be asked to what end are the mates and captains of merchant ships tested for colour-blindness, when many others to whom the steering and course of the ship is constantly entrusted are never examined at all. In the locomotive service on land, whilst it is absolutely necessary that the engine-driver should have correct appreciation of colours, the signalman might be subject to defect of this sense without harm to the public, since his movements are guided by printed directions in respect of which there can be no mistake, and the coloured glass he turns on to the driver is turned away from himself; but in the case of a ship the movements of each of the steerers are guided by the same sense, and disastrous accidents are sure to happen if either steerer fails to accurately distinguish colour. It would hardly be credited that up to the present time pilots are not compelled to give evidence of their full possession of the colour sense. Mr. Gray points out that for the small sum of one shilling all sailors have an opportunity of being examined, and expresses his regret that the Board of Trade has not been supported by the shipowners. That numbers of officers who obtained certificates before the colour test was prescribed are still afloat and in charge of vessels there can be no doubt. These should all be subjected to examination without delay. To the report is attached a page with three cards coloured respectively red, light-green, and black, which are used by the examiners. To this test we should be inclined to take exception, and would suggest the substitution of a pink for the vermilion. It is not uncommon in cases of partial colour-blindness for a patient to indicate saturated colours correctly, whilst he is totally unable to distinguish pink from a light shade of green. It is precisely such colours which are the most important in practice. When the lights are bright and clear red and green, the loom of the vessel can almost always be seen, and no collision can occur but through intense stupidity; but when there is a light haze, a red light becomes pink and indistinct, and the partially colour-blind is then at the greatest disadvantage; the lights may be seen but the vessel is invisible, and the result of confusion of colour may be anticipated. An officer who not long ago was compelled to leave the service on account of colour-blindness had actually brought home several of Her Majesty's vessels as flag lieutenant from the Mediterranean; and in this instance, whilst saturated colours were easily recognised, pale greens and pinks were constantly confused. His defect was easily ascertained by placing coloured lamps at a distance of several hundred yards. Mr. Gray mentions, without recommending, Dr. Thompson's skeins, which are certainly very serviceable. One point in the report strikes us as remarkable. It is stated that in regulations still in force a candidate who fails to pass the colour test may be re-examined after the lapse of three months from the date of his failure; if he fails a second time, he is allowed a third trial at the expiration of three months from the date of his second failure. Does the Board of Trade think colour-blindness a defect that can be got over by study, and that by applying his mind a man can overcome the difficulty as he would the use of the sextant? Surely a competent ophthalmologist should revise the regulations.

AN APOLOGY FOR LONDON SMOKE.

THE debate at the Society of Arts on Wednesday week on the sewage question and on the removal of refuse other than sewage called forth two papers, one by Dr. Thomas Hawksley, the other by Dr. B. W. Richardson. Dr. Hawksley repeated the arguments he has so long and so skilfully used in favour of the earth-closet system, and the total abolition of water carriage of sewage matter. Dr. Richardson dealt almost entirely with the work of the dustman, an official whom all Londoners look upon with almost as much awe as they do on a Prime Minister, and who, indeed, is to many a household even a more important officer, taking him all the year round. There were a number of weighty matters of a practical kind in both essays, but the point which seemed to elicit the most attention, and which met with considerable approbation at the moment when it was announced, was Dr. Richardson's statement that London smoke, bad as it may be and is, is not an unqualified evil in the present state of the sanitation of the metropolis. The argument was that so long as householders are obliged to ventilate their house-drains by means of long tubes extending to or above the roofs of their houses, and so long as they pollute the air in those upper regions, so long also does the fine carbon of the smoke from the chimneys, poured out almost at the same level, exert a salutary influence over the drain emanations. In other

words, if London air were entirely free of carbon and were systematically charged from houses with sewer gas, the clear air would become a noxious air, and it is better, therefore, to let the clarification of the heaven above be suspended until the purification of the earth beneath can at the same time be secured. This is, without doubt, a view of the subject in hand that deserves to be considered. That cases of disease have been engendered by the emanations from ventilators into bedrooms seems beyond question, and that carbon in a state of fine subdivision is a destroyer of organic poisons from decomposing materials is not less certain. We ought, therefore, to keep in view in all future sanitation the necessity for cleanliness from the drain of the dwelling as well as from the chimney-pot; sanitation, like all else, having its basis in mother earth.

UNIVERSITY COLLEGE HOSPITAL.

HIS Royal Highness the Prince of Wales has consented to preside at a festival dinner on behalf of the funds of this hospital, to take place on Wednesday, May 13th, at the Langham Hotel. The committee are naturally anxious that the efforts made by the friends and patrons of the hospital and medical school shall prove as successful as the occasion is auspicious. It will doubtless interest the past students at the College and Hospital to know that last year an "Old Students' Jubilee Fund" was initiated by the medical and surgical staff with a view to obtaining means for the ultimate rebuilding of the hospital. The Dean of the Medical Faculty will, no doubt, be happy to receive, in the shape of substantial contributions, appropriate assurances from former students that they are not unmindful of their indebtedness to their *alma mater*.

LORD BRAMWELL ON DRINK.

THERE is nothing so much spoken against nowadays as "drink," and nothing, consequently, in more need of apologists. Some very good judges, indeed, think, from the very severity of the vituperation, that it must be overdone. That vein of charity in the human mind which sees a soul of good in things evil has asserted itself, and both in the medical and legal professions great champions are on the ground to see that justice is done. It is well that it should be so. Lord Bramwell, as the able spokesman of the League for Defending Liberty and Property, has written a smart little defence of "drink." He admits the harm it does: "Disease is brought on, health is ruined, insanity and death are caused, by excessive drink. There is no doubt also that crime is caused by drink." He admits all the harm done, but claims that the good done is more. We must make clear what are Lord Bramwell's views of the good done by "drink." First, "it gives a vast deal of pleasure and enjoyment to those who take it with moderation." But his second, and perhaps chief, argument is that it is useful. With much skill he throws on other shoulders and on another profession the responsibility of stating this part of the case. He falls back on Sir James Paget's well-known argument that the best and the largest quantity of brain-work is being done by the nations in which the use of alcoholic drinks is and has been habitual; and further, that as regards the brain-work of different persons, "they have done the best and most who have habitually and temperately taken alcoholic drinks." It is exceedingly difficult to make comparisons of this kind of much value, as the nations and persons so compared differ in so many other respects besides the mere difference of alcohol-taking. It must be admitted that teetotalism has still its feats to achieve in war, in genius, in statesmanship; and with practical men such rough judgments as that of Sir James Paget will have much weight. But Sir James himself would be ready to admit that even some of those who have done the best brain-work took too much alcohol, and that the world might have got much more good work out of them had they taken less. With one of Lord Bramwell's positions we are not quite satisfied. Society's right to interfere with individual liberty being limited to securing person and property from external and internal attacks, he thinks the prohibition of "drink" not within the right of society. But if its prohibition be not within the right of society, certainly the prohibition of drunkenness is well within its right. Drunkenness is altogether an offence to society, and an injury as well. There is nothing more clear than that drunkenness tends to poverty, and that the family of the drunkard is apt to become a burden on the ratepayers. They have a perfect right to prevent the sale of that amount of drink which involves them in heavy taxation and their fellow-citizens in misery and disease.

EPIDEMIC OF MEASLES AT BUENOS AYRES.

LAST summer Buenos Ayres experienced an epidemic of measles, an account of which is published in the *Revista Argentina* by Dr. Penna. At the beginning of the year there had been a number of cases of very mild enteric fever; these were followed by a considerable increase in fatal puerperal affections, and in June the number of small-pox cases usually existing increased markedly. The first cases of measles which then appeared occurred in lodging-houses, families were then attacked in their residences, and finally the soldiers and gensdarmes of the garrison. The drainage of the city was at the time in an unsatisfactory state. Dr. Penna saw sixty-two cases, varying from two to forty years of age. The incubation period varied from eight to nine days. The symptoms of invasion were, as usual, chills, headache, prostration, languor, anorexia, insomnia, and elevation of temperature, followed by the characteristic oculo-nasal catarrh, photophobia, lacrymation, coryza, sneezing, &c., and afterwards by tracheo-bronchial symptoms, with sometimes violent cough simulating that of croup. Moist and dry râles were heard frequently in the chest, sometimes arousing suspicions of phthisis. Several cases of epistaxis occurred; none of them were severe. In two children considerable subconjunctival hæmorrhage took place, encircling the cornea with a sanguineous ring. There were no cases of convulsions, but delirium was frequent where the temperature was very high. The course of the fever in no instance gave cause for alarm, except where complications existed. The remission on the third day, as described by Jaccoud, and which Kaposi states appears on the second or third, and which by its constancy serves to distinguish the catarrhal inflammation preceding the eruption, was only observed in adults, who could state exactly when the symptoms commenced, and in some doubtful cases which came under observation from the beginning. The temperature remained high for two or three days, sometimes for four, six, or eight days, until the eruption appeared. These latter cases cannot unfortunately be well explained, and sometimes lead to a doubtful diagnosis. Generally the eruption appeared from the fourth to the sixth day, preceded in some cases by a marked rash on the soft palate and pharynx. It invariably commenced on the nose, chin, forehead, and cheeks, never on the trunk or limbs. The eruption consisted of irregular spots, not always of uniform redness, sometimes slightly raised, and occasionally with papules on the edges. The duration of the eruption varied from one and a half to three days. In one child it lasted six days, the colour being very deep. In a girl of three years the eruption appeared and faded at short intervals several times till the third day, from which time it ran its ordinary course. This child had just recovered from a severe attack of broncho-pneumonia. The fever

accompanying the eruption frequently rose to 40° or 41° C., especially in children, and the pulse rose and fell with the fever. The complications were capillary bronchitis, which carried off two children, two cases of croup, and two deaths from lobar pneumonia in Indians. In four cases the disease assumed a typhoid character, in two there was tuberculosis, and in some others suspicions of that affection. No active medication was employed, excepting in cases where complications existed.

MR. COMBER ON THE CONGO.

WE have taken frequent occasion to note the good done in the world by medical missionaries. It is very pleasant to see in other and authoritative quarters a similar recognition. At the Geographical Society last week a very just tribute was paid by Sir Henry Rawlinson to the scientific value of the work of Mr. Comber, who is connected with the Baptist Missionary Society, and in that capacity has explored the Congo to a higher point than any previous traveller except Mr. Stanley. He succeeded in getting up 400 miles beyond Stanley Pool, and by his observations giving scientific clearness and definition to the geography of the river and some of its chief affluents. Speaking of the healthiness of the river, he said that on the coast and the delta of the river Europeans seemed to have good health; also on the Upper Congo between Stanley Port and Stanley Falls they did well. Only one had died. But in the Cataract Region of the Congo, between Vivi and Stanley Pool, about 200 Europeans had been located for the last six years, and about 25 per cent. of these had died. Mr. Comber attributed this high mortality to the fatigue and exposure undergone in building, travelling, &c., and anticipates much less sickness when locomotion is facilitated by the railway, and life by the introduction of skilled labour. It is very gratifying to see our missionaries adding to their beneficent work that of observations of the highest scientific and human interest. Much gratitude was expressed by Mr. Comber and others to Mr. Stanley and to the King of the Belgians.

PREVENTION OF THE SPREAD OF SCARLET FEVER.

THE *Medical Record* of New York, March 14th, contains the report of a discussion, in the Practitioners' Society of New York, on the subject of Practical Considerations on the Propagation of Acute Infectious Fevers, especially Scarlet Fever. The first question raised was the contagiousness of scarlet fever during the stage of incubation. Some speakers believed in the possibility of this, but the chief evidence went to show that the disease was very feebly infective at this stage, if so at all. As to measures deemed necessary during the sickness of the patient to prevent the spread of the disease, nothing very new was suggested, and the chief reliance was on isolation and plenty of air, the disinfection of clothes, and the hanging of a sheet wetted with a disinfectant solution before the door. One gentleman thought the room, and not the child, was the chief source of danger. Some speakers were disposed to think that the whole of the desquamative period was not infectious—only the earlier weeks; but Dr. Kinnicall very properly demurred to this, and said that careful thermometric observations showed that a slight elevation of temperature persisted in the third and fourth weeks in a large number of uncomplicated cases. He pointed out, too, that cases had occurred in which desquamation had lasted until the seventy-seventh day. The fourth question discussed was whether physicians should attend both scarlet fever cases and obstetric cases at the same time. Several speakers thought it undesirable. The President thought the risk much exaggerated. We think so too, if such precautions as those taken with visitors at the London Fever Hospital and by most careful practitioners are duly observed. The chief of these are, after doffing the outer clothing, to put on a surplice over the remaining dress of the physician in going into the patient's room; to wash the hands and, if possible, the mouth carefully on leaving the patient's room, of course prescribing and enforcing all due precautions for limiting the diffusion of the scales from the skin and securing their being burnt. With such precautions as these there will be little risk of the spread of infection by means of the medical attendant.

"AN OFFICIAL FIB."

A MADRID medical journal just to hand thus expresses its views on the subject of the epidemic in the province of Jativa, which was announced in certain newspapers as cholera:—

"What is taking place in Jativa? A malady prevails which has in an unlooked for manner become epidemic, whose symptoms make us suspicious of Asiatic cholera, a disease which has had several victims, which is communicated from one to another, and about the diagnosis of which there is disagreement amongst skilled observers; a disease, too, which has produced much alarm amongst the inhabitants, and has required preventive measures, sanitation, and a hospital service, and, indeed, all the measures which are adopted in dealing with true cholera. In official circles it is called gastro enteritis—an official fib,—which will become incorporated in statistics, reflecting but little credit on the exactitude of science or on the truthfulness of those who write such fraudulent reports. What purpose can be served by this bold attempt to hoodwink public opinion, giving rise to the most dangerous uncertainties, and the result of which it is impossible to foresee? What teaching can efface the occurrences last year in Toledo, Tarragona, Alicante, Novelda, and other places where politicians gave vent to their complaints? The Cortes have now been open three months, and no one has thought it necessary to demand from the Government a satisfactory answer to a question as to their behaviour in this matter, thus leaving the country in a sad state of uncertainty as to the course to be pursued. We shall not be surprised if, as the recent statements from Jativa and another town in Valencia makes us fear will be the case, similar untruths are promulgated on any repetition of these occurrences that may take place this year."

This would seem to be an excellent opportunity for Dr. Ferrán to demonstrate conclusively the practical value of his researches on "cholera vaccinia." His colleague, Dr. Pauli, stated at a banquet, lately given in honour of Ferrán, that he (Pauli) had just come from Jativa. We shall look with interest for an account of what results he has to report.

IMPRISONING AN UNDOUBTED LUNATIC.

NEXT to solemnly hanging a maniac who in his morbid frenzy has slain a fellow-creature, there is no more grotesquely absurd and humiliating proceeding than that of imprisoning a lunatic who declaims somewhat inconveniently in public. We confess our inability to understand how any magistrate with two ideas and time to think can have come to the conclusion that it was consistent with the dignity of a justice of the peace to commit an undoubted victim of insane delusions as is Herbert Freund—sometime an inmate of the City of London Asylum at Stone—for two months imprisonment. The procedure was not fair to Freund, and may be perilous to the community. We have no right, and it is not prudent, to irritate madmen. When this poor man comes out of prison to continue his labours as a prophet acting under "inspiration," he may conceive it to be his duty to do more dangerous work than simply disturbing a

crowd or a congregation. Surely this is a matter in which the Secretary of State may be fairly asked to interfere. Freund should either be certified and sent to an asylum or allowed to go at large, and the police should be instructed to move him on gently, though effectually—not to treat him as a man responsible for his actions, which he unquestionably is not.

THE EXPLOSION AT THE ADMIRALTY.

ANOTHER explosion, this time at the Admiralty Offices, Whitehall, took place at about eleven o'clock on the morning of the 23rd. By it the assistant secretary, Mr. Swainson, was injured. The explosive compound, probably dynamite, and about two pounds in quantity, was placed in a cupboard above, somewhat behind and to the left of the secretary, who sustained serious injuries. When found he had evidently been blown from his chair, and was lying against the wall, huddled up, covered with dust, and quite insensible. The unconsciousness lasted for about two hours, and was followed by vomiting. Slight irregularity of the pupils was observed. There were several scalp wounds, one being about three inches in length; all were contused, and there was much dirt in them. The bone was not injured. There was also a contused wound of the left conjunctiva near the inner canthus. There was no deafness. The eyelashes, eyebrows, and hair had been burnt by the explosion.

SIR WILLIAM JENNER.

WE regret to say that Sir William Jenner is at the present time confined to his room by indisposition. About nine years ago Sir William had a short attack of plastic bronchitis, from which, however, he recovered completely. On Tuesday last, after seeing his patients, in the evening there was a recurrence of this affection, attended by slight hæmorrhage. There has been no febrile disturbance, and the malady is gradually, but certainly and steadily, disappearing. Dr. Russell Reynolds has been in constant attendance upon him, and has been in daily consultation with Sir William Gull.

SEPTICÆMIA.

Is septicæmia the result of the action of ptomaines or microbes? This is the question which M. Jeannel and of M. Laulanié have attempted to answer in a brief paper communicated to the French Congress of Surgery (*L'Union Médicale*, April 16th). Ptomaines, being in a state of solution, are able to penetrate the layer of granulations lining a wound. Microbes cannot enter the circulation unless a solution of continuity exists in the layer of granulations. As septicæmia is only observed when a break in the continuity of the living membrane of a wound exists, the authors conclude that the ptomaines play a subsidiary *rôle*, whilst the principal part in the pathogeny of septicæmia is left to the microbes. The arguments used are, in our opinion, not absolutely conclusive.

THE RABBETH MEMORIAL FUND.

THE subscriptions to this fund, which is now closed amounting to between £800 and £900, will be devoted to the maintenance of two cots, one at King's College Hospital, and the other at the Royal Free Hospital. The Senate of the University of London had £100 from the fund placed at its disposal for the founding of a Memorial Medal, but this has been declined with thanks, lest it should be considered a precedent for the authorities of the University. Mr. J. E. Rabbeth (Dr. Rabbeth's father) has offered a sum of money to the Council of King's College to found a Scholarship in memory of his son, who was educated first in the School and then in the medical department of the College. The offer has been gratefully accepted, and, at Mr. Rabbeth's desire, the money will be devoted to a special exhibition for boys passing from the school into the medical department. A final committee meeting will be held at King's College about the middle of May, probably on the 18th.

THE PUBLIC HEALTH (MEMBERS AND OFFICERS) BILL.

A MEDICAL officer of health, in adverting to our recent annotation on the "Public Health (Members and Officers) Bill," considers it very unfair that officers should not be allowed to have shares, or be interested in, waterworks or gasworks. In so far as the prohibition holds good, we are of opinion that it is very undesirable for medical officers of health to be pecuniarily interested in concerns the prospects of which it becomes their duty to promote for the purposes of health. It is only recently that a medical officer of health found himself seriously hampered in his endeavour, during an epidemic of enteric fever, to secure the closure of polluted wells, and the substitution of a water from the public mains, and this because the inhabitants had been given to understand that he was interested as a shareholder in the water company; and it was only as the result of a public announcement that this belief was incorrect that the needed action could be taken. There may be individual cases of hardship, but the principle involved in the prohibition referred to is sound.

THE ARMY MEDICAL STAFF: THE REVISED SCHEDULE.

THE revised schedule of qualifications of candidates desirous of obtaining commissions on the Army Medical Staff, with the conditions of service, has just been issued. The only change which has been made in it since it was withdrawn last month is that the position of the officers on the list will be determined "by the combined results of the competition and qualifying examinations," instead of the competitive examination only. We consider this change to be satisfactory, as holding out an inducement to, and reward for, good work done in the school at Netley.

UNHEALTHY HOUSES.

THE decision arrived at in the case of "Chichester *v.* Lance," which was tried last week before Mr. Justice Wills and a special jury, is another step in favour of tenants who seek to make their landlords responsible for the sanitary state of the houses which have been let to them. In this special case the defendant had effected some so-called improvements, but the work was so carried out as to be ineffectual; and typhoid fever having occurred in the house, the plaintiff has secured judgment and damages to the extent of £40. Landlords will have to understand that when they let premises as dwellings, it must be regarded as an essential part of the transaction that the premises are adapted to healthy occupation.

GUY'S HOSPITAL.

THE governors of Guy's Hospital have, we understand, made a new departure in the mode of election of assistant physicians. Hitherto the vacant posts have been closed to all but Guy's men. There is now a vacancy for an assistant physician at Guy's Hospital, and it is the expressed desire of the governors that applications should be sent in from any gentlemen who may choose to become candidates. This step cannot fail to be regarded with approval by the profession.

AT a meeting of delegates from the metropolitan vestries and district boards of works on the 16th inst., resolutions were passed expressing the opinion that it is desirable in the interest of the inhabitants of the metropolis, and as a general principle, that all telephone and telegraph wires within the metropolitan area should be placed underground; that the control of the construction and maintenance of all such wires should vest in and be under the direction of the vestry or district board of the parish or district; and that a letter be sent asking, on behalf of the conference, that the Committee of the House of Commons should hear one witness from each vestry and district board of the metropolis.

FROM the report made by Messrs. Crookes, Odling, and Tidy, on the composition and quality of daily samples of the water supplied to London for the month ending March 31st, it appears that of the 188 samples examined the whole were found to be perfectly clear, bright, and well-filtered. The mean amount of organic carbon in the Thames-derived waters for March was practically identical with that for February—viz., 0.18 in 100,000 parts of the water. Considering the condition of the river during the month, and the additional care needful to effect good filtration, it is noteworthy that not one of the 188 samples contained so much as a trace of suspended matter.

AT a meeting of the Vaccination Officers' Association, held at the Charing-cross Hospital Medical School on Saturday, April 18th, the members considered the best means of securing the vaccination of children born in public institutions, and it was resolved—"That the attention of the Local Government Board be called to the large number of children who are permitted to leave public and parochial institutions unvaccinated, and respectfully suggest that, if a special fee were paid to all medical officers of public and parochial institutions for successful cases of primary vaccition, the returns of vaccination would to a great extent be improved."

CONSEQUENT upon the cholera scare in Spain, the Local Boards of Health in many of the Spanish Mediterranean ports and in the Balearic Isles have, it appears, without even receiving orders from Madrid, established quarantine regulations for vessels from the province of Valencia, whilst several towns refuse to receive goods or passengers from the infected districts, which are nearly free from the epidemic. France, Portugal, Turkey, and Holland have already established a quarantine on arrivals from Spain.

THE late Dr. Wells' funeral took place at Reading on Saturday, the 18th inst. Some ten thousand persons of all classes of society assembled in the streets and at the cemetery to pay respect to his memory, and a string of carriages more than a mile in length followed his remains. All the medical men in the neighbourhood attended, as well as large numbers of the clergy, the governors of the hospital, and nurses.

A MOTION by the Croydon Rural Sanitary Authority that the operation of the injunction granted by Mr. Justice Denman on Jan. 12th of the present year, restraining the authority from polluting a piece of water near Garratt, called the Western Pool, by illegally discharging sewage thereinto, might be suspended, was last week dismissed by Mr. Justice Chitty with costs.

MR. E. HURRY FENWICK, F.R.C.S. Eng., has been appointed Examiner in Elementary Physiology at the Royal College of Surgeons.

ON the 4th inst. the death occurred of Dr. James Lawrence Little of New York. He was Professor of Clinical and Operative Surgery in the New York Post-Graduate Medical School and Hospital, Professor of the Principles and Practice of Surgery in the medical department of the University of Vermont, and consulting surgeon to the Mary Fletcher Hospital at Burlington, Vt.

A BILL is before the Legislature of Ontario, and bids fair to become law, which provides that the bodies of persons found dead, also of those who die in public institutions (lunatic asylums excepted), and are not claimed by friends who are willing to pay the funeral expenses, shall be handed over to the medical schools for anatomical purposes.

A CIVIL LIST pension of £100 per annum has been awarded to Edward Scott Docker, Deputy Inspector-General of Hospitals, in recognition of his discovery of the uses of ipecacuanha in the treatment of dysentery, and of his services towards Her Majesty's forces.

A DEPUTATION of the Parliamentary Committee of the Medico-Psychological Association waited on the chief secretary of the Lord Chancellor, at the House of Lords, on Monday, the 21st, to express their views on the proposed Lunacy Law Amendment Bill.

THE Senate of the University of Glasgow, at their meeting on Thursday, the 16th inst., resolved to confer the degree of LL.D. on Professor Struthers of Aberdeen.

WE regret to record the death, on the 18th inst., from enteric fever, of Surgeon Paul Bennett Conolly, who was attached to the right camp, Dongola, as surgeon of the Light Division, Camel Corps. He was in his thirty-first year.

THE Bill to amend the Medical Act, 1858, has been just issued.

INDIAN HEALTH STATISTICS.

No. II.

THE gaol population in 1883 shows, like the army, a marked improvement in health. The average number of prisoners was 88,174, among whom the admissions into hospital were 996, the deaths 31·37 per 1000, and the daily sick 36·5 per 1000. Intermittent fever was the most prevalent disease, and was the cause of more than one-third of the admissions; abscess and ulcer were next in frequency; dysentery and diarrhœa gave rise to the greatest number of deaths, amounting indeed to one-third of the whole; respiratory diseases were the cause of upwards of one-sixth; fevers and cholera rank next; the deaths from dysentery and diarrhœa were 10·64, from respiratory diseases 5·30, from fevers 2·52, and from cholera 2·28 per 1000. The prisoners, like the native troops, show very little susceptibility to enteric fever, only 15 cases with 8 deaths having been reported. The admissions ranged widely in the different gaols. In Bengal they averaged 949 per 1000; in Bombay, 734; in Madras, 861; in British Burmah, 1159; and in the Andamans and Nicobars, 1454. In Bengal some of the gaols yielded a very high death-rate: at Jalpaiguri, of 117 prisoners 35 died, being in the ratio of 299 per 1000; 19 of the deaths were from cholera, and 10 from dysentery and diarrhœa. Gorakhpur, with 607 prisoners, had a death-rate of 146 per 1000, chiefly from the same diseases; Ranchee, with 160, lost 187 per 1000; Dinagepore, with 184, lost 183 per 1000; and Raipur, with 788, lost 143 per 1000. In no less than ten gaols in this Presidency, including those just mentioned, the mortality was above 10 per cent. In Bombay, the only large gaol in which so high a rate occurred was at Shikárpur, where of 656 prisoners 66 died. In Madras the

highest rate was 86 per 1000 among 93 prisoners in the Tanjore gaol. At Akyab and Kyaukpyu, in Burmah, the mortality in the gaols was as high as 133 and 169 per 1000; at the former from cholera and dysentery, and at the latter from cholera. In the convict establishment at the Andamans, although the admissions and mean sick were much above the average of the gaols in India, the death-rate was comparatively low, amounting to only 19·63 per 1,000; the sickness and mortality and mean sick were all very much lower than in any year on record.

The sanitary sheets received from the gaols, while recording a considerable amount of improvement, show clearly that there is still much to be done in preventing overcrowding, increasing the means of ventilation, improving drainage, water-supply, food and clothing. We trust that the steady work which has been going on of late years in the removal of insanitary conditions may be continued, as the result cannot fail to be well marked in a progressive diminution of the sickness and mortality among the prisoners.

The registration of births and deaths in the civil population of India is still so imperfect that we fear no reliance can be placed on the results. The returns, however, of the mortality by certain diseases, as cholera and small-pox, afford some interesting information when compared with the results for previous years. Cholera prevailed with great severity in the province of Berar, 27,897 deaths having been recorded in a population of a little over two millions and a half; the death-rate by it amounted to 10·61 per 1000. The disease began in April, but it was not till July that it assumed the proportions of a great epidemic; in July and August 25,198 deaths were recorded. In Assam it caused a mortality of 3·29 per 1000, the most fatal months being January and April to July inclusive. In the Bombay Presidency the death-rate from cholera was 2·31 per 1000, being considerably above the average, but its great prevalence and mortality took place in the Northern Deccan Division, 30,298 deaths having been recorded in it out of a total of 37,954 throughout the Presidency. There is a curious fact mentioned in connexion with the question of fairs as one of the supposed causes of the spread of cholera. In the Sholapur district, where it was prevalent, a fair was held in July, and "the disease appeared among the people with great severity"; while in the Kaira district, where it also prevailed, although to a less extent, the usual fair was held in September, and there the disease did not break out.

In the Report a number of examples are given in which the beneficial influence of removal from the place where the disease broke out was very marked. Among the European troops at Allahabad, the native troops at Kamptee, and the prisoners at Jalpaiguri, the disease seemed to be at once arrested by the movement into camp, and in only one instance—that of the prisoners in Gorakhpur gaol—did it continue to prevail after the change of locality. There is one statement in the report in connexion with the spread of cholera which appears to us to be at variance with the facts as shown by the returns. "No case is adduced which favours the idea that the disease was spread by contagion. The positive information regarding the experience of those who came in contact with the sick is, as usual, altogether opposed to this idea. The results are shown in the following statement, which has been so frequently made in previous reports, that attendance on cholera cases involves no danger greater than that to which all persons residing within a cholera-affected locality, and exposed to the causes which induce cholera, are subject." The table shows the proportion of attendants on cholera patients attacked by the disease to have been: among the European troops 1·57, native troops 2·22, and in the gaols 2·51 per cent. But if the statistics be taken of those stations and gaols only at which cases occurred during the year, the ratio among the troops and prisoners will be found to have been: for European troops 0·50, native troops 0·68, and prisoners 1·70 per cent.; so that the proportion attacked of the attendants was considerably above the average of the others. This does not necessarily prove the disease to be contagious, but it shows at least that the attendants are exposed to conditions which render them more liable to an attack. Small-pox prevailed to a great extent among the civil population in 1883, the recorded deaths having amounted to 232,363, or nearly three times as many as in the preceding year. Its greatest mortality occurred in the North-West Provinces and Oudh, where the death-rate was 3·14 per 1000. In Assam and Berar and in the Madras Presidency it was considerably above the average of past years. Vaccination continues to receive much attention in India, but is still very far from being general.

A brief summary is given at the end of the Report of the investigations made at Calcutta by the German Commission, consisting of Drs. Koch, Gaffky, and Fischer, and by the British Commissioners, Drs. Klein and Heneage Gibbes; but it is unnecessary to notice this, as the information contained in it is rendered of comparatively little value by the more extended reports which have since been published by the Commissioners themselves. In the appendix is a detailed medical history by Surgeon-Major Johnson of the Aka Expeditionary Field Force; and also a medical report of the Indian Division, Egypt Expeditionary Force, 1882, by Deputy Surgeon-General Colvin Smith, who accompanied it as Principal Medical Officer. The latter shows the force sent from India to Egypt to have consisted of 199 officers, 1713 European and 3961 native soldiers, and 6478 followers. The period from the date of arrival of each corps till it was struck off the force varied from thirty-four to sixty-three days. The admissions into hospital from the European troops amounted to 361 and the deaths to 9, and from the native troops to 485 and 6. These numbers, calculated on the strength in the usual manner, show the *annual* ratio of admissions to have been: of the Europeans 1597 and of the natives 919 per 1000, and the deaths to have been 39·82 and 11·36 in each class respectively. Of the 9 deaths among the European troops 3 were from gunshot wounds, 2 by drowning, 3 by sunstroke, and 1 by diarrhœa; of the 6 among the natives, 4 were by gunshot wounds, 1 by dysentery, and 1 by gangrene of foot following an accident on shipboard. The 3 deaths by sunstroke occurred in the Seaforth Highlanders, and were, we regret to say, a result of drinking at Suez and subsequent exposure to the sun; 10 cases occurred in the short march of three miles from Suez to the Victoria Hospital. There were 14 cases in the force during its service in Egypt, and all of them in this regiment. The most prevalent diseases among the Europeans were conjunctivitis and ague, and among the native troops dysentery, conjunctivitis, and ague; dysentery was the cause of one-fourth of the admissions among the latter. Considering the short period during which the Indian contingent was in Egypt and the arrangements which had been made for its reception, it must be obvious that no fair comparison could be instituted between the sickness and mortality in it and the rest of the force in Egypt. But the circumstances under which the Eastern Soudan expedition was undertaken so much more nearly resembled those under which the Indian force served as to permit of such a comparison. That campaign lasted fifty-one days, and was undertaken after due arrangements had been made.[1] The admissions into hospital were in the *annual* ratio of 912, and the deaths of 224·4 per 1000, all of them in action. The sickness, therefore, was almost identical with that of the Native Indian Contingent in Egypt; no deaths were caused by disease in the one force and only two in the other, and of the latter one was consequent upon an accident.

The history of the Aka Expedition by Surgeon-Major Johnson is very interesting. It consisted of 30 officers, 1028 men, and 1993 followers, and lasted two months. None of the officers died; four of the men were killed, and one died of pneumonia, and there were sixteen deaths of followers—ten from pneumonia and bronchitis, four from fever, and two from diarrhœa. Three of the deaths in action were caused by poisoned arrows, and an interesting account of the symptoms is given in the report. The poison is believed to be prepared from the root of the *aconitum ferox*. Great difficulty was experienced in some places in effecting the carriage of the sick in dandies, and some *thappas* were constructed, which are stated to be admirably adapted for the purpose over difficult ground. They are made of canes and split bamboos, and are carried on the back and shoulders of a coolie, and supported by a flat band of woven cane or bamboo, one end supporting the *thappa* below the seat and the other passing round the head and across the forehead of the carrier. "A strong coolie will in this way carry a man of ordinary weight up or down the steepest pathway, as both his hands and arms are free to assist him in difficult places." This appears closely to resemble the modification of the Tyrolean kraxe proposed by Staff-Surgeon Michaelis of the Austrian Army for the carriage of sick and wounded in mountainous districts, to

[1] THE LANCET, Sept. 6th, 1884.

which we called attention in THE LANCET of January 3rd last. We again recommend these proposed means of transport to the consideration of the military medical authorities.

BRITISH DENTAL ASSOCIATION: MIDLAND BRANCH.

THE annual meeting of the Midland Branch of the British Dental Association was held on Friday the 17th inst., at the University College, Nottingham. Mr. H. Blandy presided. A number of specimens, appliances, &c., were shown, and several demonstrations given. The principal of these were—an operation performed illustrating Herbet's method of gold filling; a new method of vulcanite plates in steatite by the dry system, was shown by Mr. Brunton of Leeds; and demonstrations of taking models in plaster by Mr. W. Bowman Macleod.

A Council meeting was subsequently held, the retiring President (Mr. J. Harrison, Sheffield) in the chair. The report stated that in December last the Central Branch was inaugurated in Birmingham, and the Council rejoiced in this multiplication of centres, from which the influence of the British Dental Association must radiate. The membership of the Association was eighty-eight, which was far below what they desired to see. The Council nominated Mr. H. Blandy, of Nottingham, as President, and Mr. A. M. Mathews, of Bradford, President-elect; it is also recommended the holding of the next annual meeting at Bradford. The report was adopted.

In his address, the PRESIDENT (Mr. H. Blandy), after briefly sketching the history of the British Dental Association, alluded to the work of their venerable friend, Mr. John Tomes, whose name would be known over the whole scientific world for his valuable work as an anatomical and physiological investigator, and revered by his brother dentists as the champion and pioneer of dental reform. They sought to make the dentist an educated and scientific man, and they would have him pass an examination in arts identical with that formerly demanded of the student of medicine alone. They required an apprenticeship of three years to a registered and qualified practitioner, and a three years' course of hospital study in medicine and surgery, as well as courses on special dental subjects in a dental hospital. This was at last granted by the College of Surgeons, and a curriculum of study marked out. In 1878 they obtained the Dentists Act, which demanded registration of all persons practising dentistry. Another great evil of the dentistry of the past was the advertisements of the quacks. The College of Surgeons demanded of their licentiates a solemn undertaking that they would not advertise or associate their names with anyone who did. It was to be regretted that dental advertisements and show-cases still appeared to disgrace their profession. The objects of the British Dental Association included not only the study of dental and the allied sciences, the maintenance of the honour and interests of the profession, and the publication of a periodical journal, but the upholding of the spirit and provisions of the Dentists Act. It seemed to him that one great difficulty of the administration of that Act lay in the constitution of the General Medical Council, which had the supervision of registration and was the chief authority. It would not do for them to advocate the abolition of the House of Lords; but it was certainly open to grave consideration whether it would not be to their advantage if it were more representative—i.e., if taxation and representation were more proportionate. They had those amongst them who were earnest workers in the field of science. It was known that bacilli and micrococci had been found in the mouth and in the tissue of decayed teeth, as also in the alveolar abscesses; and when it was recognised how rapidly they multiplied, it would be seen how important a bearing they had on dental diseases. It had been held that the human race was deteriorating in physical, if not in mental power. Models were constantly exhibited which proved that jaws were becoming more and more contracted; that wisdom, bicuspid, and lateral teeth were often absent; and that even the teeth which were present were not nearly so good as they used to be. The President concluded by welcoming the members to Nottingham.

Dr. SMITH moved a vote of thanks to the President, which Mr. STORY (Hull) seconded. The motion was carried.

In the afternoon Mr. Marshall read a paper on "Nutrition in Early Life"; Mr. F. Harrison a paper on "The Preparation of Tissues for Microscopical Examination"; and Mr. L. Matheson one on "Artificial Separation of Teeth."

This concluded the meeting, and in the evening the members dined together at the George Hotel.

MAHOMED MEMORIAL FUND.

A MEETING of the subscribers to this fund was held in the Governors' Court Room, Guy's Hospital, on Thursday, April 16th. Dr. S. Wilks, F.R.S., took the chair, and explained the steps which the subcommittee had followed to carry out the resolutions of the meeting held at Guy's Hospital in December last. Mr. Durham, the treasurer to the fund, stated that the amount subscribed slightly exceeded £2500, of which sum all had been received except about £295. It was then proposed by Mr. Durham, seconded by Dr. F. Taylor, and carried unanimously, "That the fund subscribed be entrusted to three gentlemen, to be hereinafter elected, who shall have full and absolute power to invest, hold, and dispose of the money placed in their hands, both as regards capital and the interest that shall accrue upon it, at their discretion, in such way as may seem in their judgment best calculated to promote the interests of those left by Dr. Mahomed and to fulfil the objects for which the fund has been subscribed, subject to the following conditions:—(1) "That during the lifetime of Mrs. Mahomed, and while she remains unmarried, the interest upon the fund shall be regularly paid to her for her use; (2) that, if at any time it may seem good to them, the trustees may dispose of portions of the capital for the immediate use or benefit of Mrs. Mahomed or any one of the children, provided always that no larger sum than one-quarter of the capital be given to Mrs. Mahomed for her own use, nor any larger sum than one-fifth or three-quarters of the capital sum be expended upon any one of the five children, except in case of the death of any one or more of the children, under which circumstances a proportionately larger share may be appropriated to any one or more of the survivors."

Mr. Eastes proposed, Mr. Aiken seconded, and it was unanimously resolved, "That in accordance with the foregoing resolution, Dr. Cayley, Dr. Goodhart, and Mr. Field be requested to take charge and dispose of the money subscribed; and, in the event of the death or resignation of any one of these gentlemen, the remaining two shall appoint a new trustee." It was proposed by Mr. Lushington, and carried, "That the report of this meeting, and the resolutions adopted, be forwarded to the medical journals and also to each of the subscribers to the fund, with a complete list of the subscriptions." Votes of thanks to the subcommittee, to the treasurer of the hospital, and to the chairman of the meeting, brought the proceedings to a close.

The following additional subscriptions have been received:

	£	s.	d.		£	s.	d.
W. A. Aikin, Esq.	1	1	0	T. A. Ives-Howell, Esq. ...	3	3	0
R. W. Brogden, Esq. ...	2	2	0	Hugh R. Ker, Esq.	1	1	0
Percy H. Garner, Esq. ...	1	1	0	J. V. Salvage, Esq.	1	1	0
T. S. Howell, Esq.	5	5	0				

The Treasurer and Secretaries wish to express their cordial appreciation of the courtesy and kindness that have been shown by the Editor of THE LANCET in inserting notices relative to the fund, and in thereby much promoting its success.

ARTHUR E. DURHAM, Treasurer.
JAMES F. GOODHART,
W. H. A. JACOBSON, } Secretaries.

SOUTH LONDON SCHOOL OF PHARMACY. — The following prizes were presented to the successful competitors at the school examinations (held from April 7th to 11th) on Wednesday last:—Senior Chemistry: David Kingan, medal; John G. Rowell, certificate. Junior Chemistry: Thomas C. Barkas, medal; Ernest A. Long, certificate. Botany: David Kingan, medal; Ernest Daintree, certificate. Materia Medica: Ernest Daintree, medal; Thomas C. Barkas, certificate. Pharmacy and Practical Dispensing: Ernest A. Long, medal; Jeremiah Burgess, certificate. Extra Certificates of Merit: Messrs. Carr, Fulcher, Moore, Pyle, Reedman, Robinson, and Tirrell.

WILLS OF MEDICAL MEN.

THE will of Mr. John Charles Parrott, late of Clapham-common, surgeon, who died on January 31st last, was proved on the 4th ult. by Mrs. Maria Parrott, the widow and sole executrix, the value of the personal estate amounting to upwards of £62,000. The testator bequeaths his household furniture and effects to his wife; £10,000 each to his son Alfred Albert and his daughter Julia Isabel; £10,000 upon trust for his daughter Mrs. Annie Walter; £5000 to his son John Charles; and some other legacies. His freehold residence, and the residue of his shares, bonds, insurance money, and cash at his bankers, are to be held upon trust for his wife for life, and then for his two daughters and his son Alfred Albert.

The will and codicil of Thomas Derry Jones, M.D., late of 1, Loraine-place, Holloway, and 328, Upper-street, Islington, who died on January 21st last, were proved on the 20th ult. by Ralph John Dent, J.P., and John Chalmers, M.D., the executors, the value of the personal estate amounting to over £12,000. The testator bequeaths legacies to his executors, coachman, and others; £1000 each to Ada and Jane Kipling, and £500 to Bessie Mitchell, the payment of these three latter legacies being postponed until the death of his mother. Subject to the foregoing bequests, the testator leaves all his property to his mother.

The will and codicil of Mr. William Coulthard, surgeon, formerly of 42, Hertford-street, Mayfair, but late of 49, Queen's-gardens, Hyde-park, who died on January 27th last, have been proved by Henry White and John Coulthard, the executors, the value of the personal estate amounting to over £8500. The testator leaves £100 per annum for the benefit of his sister Mrs. Clara Ann Farmer; £100 to each of his executors; and the residue of his real and personal estate to his three half-sisters, Phœbe, Jane, and Frances Coulthard.

The will of John Collis Browne, M.D., late of Mount Albion House, Ramsgate, and of 11, Sandringham-gardens, Ealing, who died on August 30th last, has been proved by Mrs. Harriet Browne, the widow and sole executrix, the value of the personal estate amounting to over £4700. The testator gives all his real and personal estate to his wife absolutely.

The will of Mr. Forster Fowler Martin Maynard, physician and surgeon, late of Kemendine House, Baldslow-road, Hastings, who died on January 1st last, was proved on the 9th ult. by Mrs. Charlotte Harriett Maynard the widow, Mr. Edward Garnet Man and Mr. Lionel Booth, the executors, the value of the personal estate exceeding £800. The testator gives his household furniture and effects to his wife, and confirms the assignment to her of his life assurance policy; and complimentary legacies to Mr. Man and Mr. Booth. The residue of his real and personal estate is to be held upon trust for his wife, so long as she shall live without marrying again, and then to be equally divided between his children.

The will of George Ridsdale, M.D., late of 26, Endsleigh-gardens, Euston-road, who died on November 11th last, was proved on the 20th ult. by Mr. Alexander Greaves, the acting executor. The testator leaves all his real and personal estate upon trust, the income to to paid to his wife for life, and then to his god-daughter, Ethel Fanny Graves.

The will of William MacOubrey, M.D., barrister-at-law, formerly of 50, Charlotte-street, Fitzroy-square, but late of Oulton, Suffolk, who died on August 24th last, was proved on the 13th ult. by Mrs. Henrietta Mary MacOubrey, the widow and sole executrix, to whom he leaves, devises, and bequeaths all his real and personal estate, to be at her own disposal.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Nathaniel James Powell, of Devonshire House, Beckenham, £250 to the Royal Hospital for Incurables, Putney; and £100 each to the London Hospital, Whitechapel-road, the London Hospital, Victoria-park, and the Eastern Dispensary, Leman-street.—Miss Sarah Ward, formerly of Leicester-place, Camberwell New-road, but late of Carshalton-grove, Sutton, £500 New Three per Cents. each to the Brompton Hospital for Consumption and Diseases of the Chest, and the Victoria-park Hospital for Consumption and Diseases of the Chest.—Mr. John Christopher Augustus Voelcker, of 39, Argyll-road, Kensington, analytical chemist and Doctor of Philosophy, £100 each to University College Hospital, and the German Hospital, Dalston.—Mr. William Danby Baker, of 385, Kennington-road, on the death of Miss Charlotte Clarke, one-third of £3000 Consols each to the British Home for Incurables, Clapham, and the Royal Hospital for Incurables, Putney.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6195 births and 3966 deaths were registered during the week ending the 18th inst. The annual death-rate in these towns, which had increased in the previous six weeks from 20·6 to 25·0, declined again to 23·2. During last quarter the death-rate in these towns averaged 21·9 per 1000, and was 2·3 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 16·2 in Hull, 16·3 in Derby, 17·8 in Nottingham, and 17·9 in Birkenhead. The rates in the other towns ranged upwards to 32·4 in Newcastle-upon-Tyne, 33·9 in Sunderland, 33·3 in Cardiff, 35·7 in Plymouth, and 35·9 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding seven weeks from 377 to 478, further rose last week to 484; they included 190 from measles, 109 from whooping-cough, 46 from small-pox, 42 from "fever" (principally enteric), 38 from scarlet fever, 30 from diphtheria, and 29 from diarrhœa. No death from any of these diseases was recorded last week in Wolverhampton, whereas they caused the highest death-rates in Cardiff, Newcastle-upon-Tyne, and Sunderland. The greatest mortality from measles occurred in Newcastle-upon-Tyne, Cardiff, and Sunderland; from whooping-cough in Preston and Sunderland; and from scarlet fever in Halifax and Sunderland. The 30 deaths from diphtheria in the twenty-eight towns included 21 in London, and 2 in Portsmouth. Small-pox caused 67 deaths in London and its outer ring of suburban districts, 2 in Liverpool, 2 in Manchester, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had risen in the preceding three weeks from 830 to 910, had further increased to 1062 on Saturday last; the admissions also further rose from 179, 141, and 185 in the previous three weeks to 307 last week, the largest number under treatment since June last. The Highgate Small-pox Hospital contained 92 patients on Saturday last, 23 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 448, 478, and 512 in the preceding three weeks, declined again last week to 449, and were 21 below the corrected weekly average. The causes of 101, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Sunderland, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Hull, Blackburn, Sheffield, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 25·0 and 23·4 per 1000 in the preceding two weeks, was 23·3 in the week ending the 18th inst. The rates in the Scotch towns last week ranged from 14·8 and 18·3 in Greenock and Perth, to 27·1 in Glasgow, and 29·0 in Paisley. The 569 deaths in the eight towns included 24 from measles, 23 from whooping-cough, 12 from diarrhœa, 7 from "fever," 7 from scarlet fever, 3 from diphtheria, and not one from small-pox; in all, 67 deaths resulted from these principal zymotic diseases, against 84 and 68 in the preceding two weeks. These 76 deaths were equal to an annual rate of 3·1 per 1000, which was 0·3 above the mean rate from the same diseases in the twenty-eight English towns. The 24 deaths from measles corresponded with the number in the previous week, and included 22 in Glasgow. The fatal cases of whooping-cough, which had been 34 and 17 in the preceding two weeks, rose again to 23 last week; 8 occurred in Edinburgh and 6 in Glasgow. The 7 deaths referred to "fever" showed a decline of 3 from the numbers in the previous week

and included 3 in Glasgow and 2 in Dundee. Of the 7 fatal cases of scarlet fever 5 occurred in Glasgow and 2 in Paisley; and 2 of the 3 deaths from diphtheria were returned in Dundee. The 12 deaths attributed to diarrhœa included 6 in Glasgow, and were 3 below the number in the corresponding week of last year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 130 and 134 in the previous two weeks, were 131 last week, and exceeded the number in the corresponding week of last year by 3. The causes of 73, or nearly 13 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 40·4, 33·6 and 33·2 per 1000 in the preceding three weeks, was last week 33·7. During last quarter the death-rate in the city averaged no less than 34·0 per 1000; whereas in London and Edinburgh the rate did not exceed 20·8 and 20·0 respectively. The 228 deaths in Dublin last week showed an increase of 10 upon the number in the previous week, and included 29 which were referred to the principal zymotic diseases, against 32, 24, and 29 in the preceding three weeks; 15 resulted from measles, 8 from "fever" (typhus, enteric, or simple), 3 from scarlet fever, 2 from whooping-cough, 1 from diphtheria, and not one from either small-pox or diarrhœa. These 29 deaths were equal to an annual rate of 4·3 per 1000, the rates from the same diseases not exceeding 3·0 in London and 2·1 in Edinburgh. The fatal cases of measles in Dublin, which had been 13 and 19 in the previous two weeks, declined again to 15 last week. The 8 deaths from "fever," however, showed a marked increase upon recent weekly numbers. The fatal cases of scarlet fever were also more numerous. Five inquest cases and 5 deaths from violence were registered. The 80 deaths in public institutions were more than a third of the total deaths recorded. The deaths of infants showed a further decline, while those of elderly persons exceeded the numbers in the two previous weeks. The causes of 20, or nearly a tenth of the deaths registered, were not certified.

Correspondence.

"Audi alteram partem."

STRANGULATED OMENTAL HERNIA.

To the Editor of THE LANCET.

SIR,—The interesting letters by Mr. Timothy Holmes and Mr. Parker, published in your issue of April 11th, revive once more the question of the due appreciation of strangulated omental hernia. Mr. Parker denies a clinical being to this form of rupture, and contends that, so far as a symptomatic outline is concerned, it is without form and void. In spite of the undoubtedly strong arguments so ably advanced by Mr. Parker, I would still venture to place myself among those who adhere to the ancient surgical faith, and believe that a strangulated epiplocele will be attended with the same symptoms, in a modified form, that follow the strangulation of bowel in a rupture. The disposal of the question must rest at present upon individual experience and impression. It will be answered when Mr. Parker's arguments have been supported or opposed by more extended clinical data, and when they have met fully the test of the post-mortem room. So far, Mr. Parker has clearly demonstrated that a serious fallacy may exist in the diagnosis of strangulated epiplocœles, and it would be at present difficult to maintain that this fallacy has not crept into all reputed cases of strangulated omentum with symptoms. The point, however, has rather a negative than a positive value; it shows that certain cases have been wrongly diagnosed, but it still does not dispose of the main question, nor touch the possibility that certain precise symptoms may follow the strangulation of a portion of omentum. It would appear that in the discussion too little notice has been taken of the important part the abdominal nerve centres play in the production of strangulation symptoms. It will, I presume, be allowed that the omentum contains nerves, and that these nerves are derived more or less directly from the great solar plexus. These nerves must obviously be damaged when the omentum is compressed, and as it can be shown that strangulation symptoms may follow upon a like lesion to other offshoots from the great plexus, it will not be unreasonable to expect that strangulation of omentum alone may be attended by the same clinical manifestations. The almost immediate pain, collapse, and vomiting that attend acute volvulus of the sigmoid flexure can hardly depend, in the first instance, upon the mechanical obstruction in the bowel, but are due rather to the impression conveyed to the solar plexus from the damaged nerves in the twisted gut. The earliest symptoms also in Littré's hernia must be explained by a reference to sudden nerve impressions rather than to a mechanical obstruction, since the lumen of the bowel is not entirely occluded, and an immediate paralysis of the ensnared part could hardly meet the manifestations produced. The collapse, deep abdominal pain, and copious vomiting that often attend crush of the testes would appear to depend upon damage to the spermatic plexus—a close derivative from the solar. The same applies to instances where in infants orchitis of an undescended testis has given rise to symptoms hardly to be distinguished from those of strangulation. In several instances, and notably one recorded by Dupuytren, an inflamed hydrocele has been mistaken for a strangulated rupture; and other cases may be mentioned where the leading symptoms of acute obstruction have followed a lesion of a limited part of the peritoneum. In the light of such instances, it may be expected that damage to the peritoneum forming the omentum would not improbably lead to such disturbances as slight shock, abdominal pain, vomiting, and constipation.

An important argument now comes to the front. "I continue," writes Mr. Parker, "unshaken in the firm conviction that strangulation alone, as strangulation, can have no symptoms, seeing that the tightest ligature never produces them." I venture to think that this ingenious argument involves a fallacy. The two forms of constriction alluded to are not identical. Mr. Parker will agree with me that certain lesions are measurable in a surgical sense. There is a lesion which when of light degree may cause severe irritation and widely diffused nerve disturbance, and which when of intenser character may cause more or less abrupt death of parts and lead to none but local manifestations. Many illustrations of this are afforded by surgery. In spontaneous strangulation of omentum the nerves are compressed, but not at once destroyed. They remain, as it were, alive under the keenly constricting band, and become the starting-point for widespread disturbance. In the case of the ligature, the parts enclosed within the thread are practically killed outright, the nerves are crushed, and their conducting power destroyed. The lesion would appear to be, and to remain, purely local. From a neighbouring part a nearly parallel example may be taken. A bunch of internal piles descend, and are nipped by the sphincter. The ensnared part is not killed outright, it may survive for days, and it becomes the seat of intense irritation leading to the most grave disorders. The same phenomena do not appear when the same piles are subjected to the surgical ligature, and I do not think that Mr. Parker would deny that symptoms attend strangulated piles because ligation of those piles is not followed by identical disturbances.

I am, Sir, yours truly,

Golden-square, April 17th, 1885. FREDERICK TREVES.

REFORM AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Your leader of this week calling attention to the general meeting of the Association of Members of the College of Surgeons must be very pleasing to Members of the College who already have joined together in large numbers, and are exerting themselves energetically to obtain from the College some sort of recognition. There is only one passage to which I wish to call attention. You say "There is difficulty in carrying out the programme drawn up by the Association, and the burden of showing how these difficulties may be overcome lies with the Association." Now, Sir, in my opinion, when any business firm, or even corporate body, is desirous of contributing to the interests of the public at large, and of removing a grievance known to exist, the public is not called upon to point out to the firm or corporate body how they are to conduct their own affairs in order to remedy the evil complained of. It may as well

be argued that a medical man having a long round of visits before him may refuse to attend an urgent message unless and until this patient first points out how the day's work can be satisfactorily gone through. Surely such interference would be laughed at and treated as an act of impertinence. I am of opinion that this applies equally to the College of Surgeons, and that it rests with the Council to consider how to advance the interests of the members when once the latter have made known their grievances and desires.

I am, Sir, your obedient servant,

M. CLIFFORD, M.R.C.S. Eng.

Warrington-gardens, April 22nd, 1885.

The following letter has been addressed to the Honorary Secretaries of the Association of Members of the Royal College of Surgeons of England:—

Dulwich, April 21st, 1885.

DEAR SIRS,—In reply to your invitation to attend a meeting of the Association of Members of the Royal College of Surgeons of England on May 5th, I am afraid that, as I do not approve of the separation of Fellows and Members into hostile camps (for which, I am bound to say, your Association is not wholly responsible), my presence at your meeting would hardly help you, unless indeed you are prepared to take steps for co-operating with the Association of Fellows, in which case I would gladly assist. It appears to me, as I believe it does to others, that the resolutions passed at the meeting held at the College in March, 1884, afford a basis on which Fellows and Members ought to be able to work for the common good. Those resolutions asked, *inter alia*, for the following important reforms:—(1) That the Fellows and Members should be invested with a larger share in the management of the College; (2) that no important alteration should be made in the constitution or relations of the College without the consent of the Fellows and Members; (3) that there should be an annual meeting of Fellows and Members, at which the annual report of the Council should be presented, received, and adopted. Had the Fellows and Members, since the meeting unitedly adhered to this moderate programme, there can, I think, be no doubt that the Council would have been ere this forced to yield; but dividing into two Associations, each bent upon securing as much for its own order as possible, the interests of the profession fell an easy prey to those who believe in the ancient maxim, *divide et impera*, and the Council of the College has been able for a whole year to act as if it had never accepted any of these proposals, not even the third, in a modified form, or as if its acceptance of that proposal was one of those inoperative resolutions which Mr. Marshall told us the Council is in the habit of passing. As there may possibly be some both in your own Association and among the Fellows who will agree with me in thinking that our true policy, in view of the determined hostility of the Council and officials of the College to all reform, should be to seek union rather than to divide our powers, I shall send a copy of this letter to the medical papers.

I am, dear Sirs, faithfully yours,

H. NELSON HARDY.

The Hon. Secs., Association of Members, Royal Coll. Surg., Eng.

THE CHELTENHAM APPOINTMENT OF MEDICAL OFFICER OF HEALTH.

To the Editor of THE LANCET.

SIR,—As one of the candidates for the above appointment, allow me to thank you for the paragraph in your last issue. In addition to the fact, which you lay stress upon, that Mr. Roch possessed only one qualification at the time of his appointment, there are other objections to the election, which it is well the thirty-four candidates should know.

1. The advertisement required that applications for the office should state age, residence, and *qualifications*. The gentleman elected did *not* state his qualification (M.R.C.S., 1854), but merely added to his name Deputy Surgeon-General.

2. The notification to the Local Government Board, instead of being made within seven days, was delayed by the Sanitary Authority (or rather, as it really was, the Mayor and Town Clerk) for three weeks, during which time the gentleman elected obtained, after *special* examination of an oral character only, and for which no curriculum is required, a licence in medicine from a college in Ireland, the value of which, as you rightly say, "can best be judged of by the circumstances under which it is procured."

3. One of the applications for the office was never opened or considered. There can be no doubt that this election was conducted in a slovenly manner. The Public Health Committee and the Town Clerk (to whom a selection of six candidates was delegated) appear never to have considered the qualifications of the several applicants, the Town Clerk ruling that this was only necessary in the case of the elected one, the consequence being that the majority of the Town Council, in voting for Mr. Roch, thought they were supporting a gentleman at least as well qualified as the other five candidates, and his want of legal qualification was never discovered until after his election; further, if one application was never opened, the inference is that others shared the same fate.

I am pleased to find that several of the candidates contemplate taking further action, and I shall be glad to join in any movement for testing the legality of the appointment. The best thing, however, in my opinion, would be—if I might venture to suggest such a course—for the gentleman elected to resign and submit his claims, now that he is fully qualified, for re-election.

I am, Sir, yours faithfully,

April 20th, 1885. A GRADUATE.

THE MEDICAL BILL AND THE SCOTCH UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to correct a mistake into which I fell in my letter of the 14th inst.? I find on reference to the journals of the House that the Medical Act Amendment Bill was exempted in the first instance from the general massacre of the innocents, and was only withdrawn at a later date, when it became evident that it would be hopeless to attempt to do anything beyond absolutely necessary work in an expiring session. I feel that this explanation is due to Sir William Jenner, whose knowledge of the detail of the question was really greater than mine, but from whose conclusions I still venture to dissent; and whilst thanking you, Sir, for your personal expressions of courtesy, I must, with all respect, continue to express my dissent from the views which you so ably advocate.

I am, Sir, yours faithfully,

Reform Club, April 22nd, 1885. R. FARQUHARSON.

SMALL-POX AT SALVATION ARMY BARRACKS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of last week a correspondent states that small-pox is now, and has for some time past been, very prevalent among the persons residing in the barracks of the Salvation Army, Clapton, and that scarcely a day has passed without some patient being removed. This is absolutely untrue. Since the barracks have been opened at Clapton, three years ago, there have been in all twelve cases; seven this year, three in 1884, and two in 1883. Every care is taken to prevent infection spreading; on the slightest suspicious symptom the cadet is isolated (in a room kept on purpose for infectious cases), and as soon as small-pox is pronounced the patient is at once removed to the hospital at Highgate. Every precaution as regards disinfection is taken after a case has occurred. So far there has been no spread of the disease in the barracks, the cases being isolated ones. In one case the disease was evidently caught at Plymouth, as symptoms of small-pox appeared within a week of the patient's arrival at Clapton. A matron and a certificated hospital trained nurse have the cadets under their constant supervision, and are prompt in isolating any one showing the slightest suspicious symptom of any infectious disorder; and, considering the number of persons residing in the barracks (over 300), and how prevalent small-pox has been in the immediate neighbourhood, in my opinion the army is to be congratulated that there have not been more cases. Either the matron, the nurse, or the medical officer, will be very happy to show any qualified medical man over the barracks.

I am, Sir, yours faithfully,

FRED. H. SPOONER, M.D.,

Lower Clapton, April 21st, 1885. Med. Off. of the Salvation Army.

WITH THE TROOPS IN THE SOUDAN.

(From our Special Correspondent.)

Base Hospital, Camp near Suakim, March 27th, 1885.

SINCE yesterday week there have been constant skirmishes with the enemy, but that of Sunday last was by far the most severe, even critical, action that has taken place; for it was one in which the Soudanese made a most determined attack on our zereba and troops, and were not repulsed until they had managed to put some 250 of our men (killed and wounded) *hors de combat*. Conflicting as the reports are which are heard from all quarters as to how this loss was occasioned, the opinion of most of those I have seen and spoken to on the subject, and who were eye-witnesses of, participators in, and also sufferers by the fight, may be summed up in a single word—Surprised! That for a time it was a disaster is certain, and a palpable disaster into the bargain—a second Isandhlwana affair, averted only by the coolness and steady bearing of our English troops. It appears that the forces under the command of General McNeil had started on the morning of Sunday, the 23rd, to form a zereba and establish a position on the line of communications a few miles out for the general advance of the main body of our troops, which intended to move a few days afterwards for Tamai *en route* to Berber. The troops, consisting of the Berkshire Regiment, Marines, Sappers, Sikhs, 17th Bengal and 28th Bombay Native Infantry, with some mounted infantry and a small body of the 5th Lancers, and some thirty-two Blue-jackets, had reached a spot five miles and three-quarters S.S.W. from the camp, quite unmolested by the enemy, and were there halted, for the purpose of making a zereba out of the bushes growing in the immediate locality. At this time the camels and mules carrying water and provisions, with their Indian and Maltese drivers, had not yet reached the *locale* selected for the camping ground, but were coming up in detachments and groups, the line of their somewhat irregular formation extending a considerable distance in the rear. The mounted scouts were out searching for the rebels; and so much security from any sudden attack was felt by those in command, that the men's arms were piled and the ammunition placed outside the half-finished zereba in one spot, whilst many of the Sappers were unarmed, cutting brushwood, some 400 yards away in another. The greater number of the soldiers thus employed were in their shirt-sleeves, and possessed no weapons of defence save the spades and pickaxes they had in their hands. Working under the scorching rays of a vertical sun, they little dreamed their foe was so near them. At this juncture an alarm was raised, the mounted scouts giving notice of the enemy's presence and rapid approach upon our position and half-finished zereba; but the warning was not in sufficient time to avert the disaster that speedily followed; nor could any means be taken to check the on-rush of their impetuous charge before many of their brave fellows had not only reached, but gone clean through, the British half-formed square. Fleet of foot—their speed even exceeding that of our troopers' horses—and courageous as lions, on they came bounding, yelling horribly, and brandishing their spears and sharp-edged swords. Their onslaught was so unexpected and so determined that, for a few minutes at least, everything seemed to fall beneath their vigorous and well-timed attack. Amidst a scene of the wildest confusion, and enshrouded in a towering column of thick dust that arose on all sides, our men were rushing here, there, and everywhere but in the right place—of course, to search for and regain possession of the arms left far away from them at the commencement of their work. What followed will long be remembered by those who have been spared, but who were unfortunate enough to have taken part in this most calamitous affair. Camels, cut loose, and disembowelled by the fiends creeping beneath them and ripping open their abdomens with short curved swords, were racing in maddening agony over the plain; whilst riderless horses and mules, whose unarmed keepers and attendants had by this time all been shot or speared by the Arabs, were kicking up their heels and scampering away in all directions, making confusion worse confounded by their snorting and hideous noises. Half-dressed semi-armed men were (hotly pursued by the foe) making for points where rallying squares could be formed by their officers; whilst fugitives—press correspondents among them,—better mounted than the rest, and unable to get within the squares, were seeking the more congenial safety of strategical retreat in a racing dash for it across country in the direction of Suakim and the entrenched camp some five miles in the rear. The 17th Bengal Infantry, unable to withstand the impetus, commenced falling back in disorder, whilst officers, men, and camp-followers were on all sides trying to get within the shelter of the forming square. One officer, a member of the medical profession, unarmed, lost his horse under him, and at the same time saw his servant and also his orderly shot dead by his side. Seizing an axe, in the absence of sword, revolver, and ammunition, he laid it about him with such dexterity and effect that he kept his antagonists at bay, got within the square, and, happily unscathed, came into camp with the wounded next day. A small unfinished sand-bag redoubt occupied by the Naval Brigade, under the command of Lieutenant Seymour, suffered terribly. Out of the nine persons there, six were killed, one was wounded, and two escaped. Poor Seymour's body presented a shocking spectacle of spear and sword wounds. Pen cannot describe the doings of that momentous Sunday forenoon's work. To avert an overwhelming calamity something had to be done, and that very speedily too. The Berkshire Regiment, the Marines, as well as the brave Sikhs, were equal to the occasion, and proved true to the core. By their steadiness and bearing under most trying circumstances the enemy were for a few minutes held in check, and some order was restored. Our boys, rallying, fell into something like fighting position, and, standing shoulder to shoulder, poured in such a destructive and deadly hail of bullets upon the advancing line of these poor fanatical, yet withal bravest of the brave, savages, that the battle was saved and the day won, and the dark legions of Osman Digna were hurled back once more to the limited shelter of the mimosa-bush, whilst the withering fire of our marksmen strewed the yellow sand with corpses, and reddened its surface with the blood of the wounded and slain. Twenty minutes' action, and the fight was over. In that brief space of time what blood had been spilt and what treasure had been lost! Rifles, spears, and swords had done their murderous work so well and so effectively that the ground was strewn with the mangled and slain, whilst a death-roll of 118 and a list of wounded to the extent of 160 men on our own side testify to the impetuous and desperate character of this affray.

A camel train of about 1000 strong a few days ago is now a thing of the past, whilst it would commercially repay any man of energy and strong nerve—if utterly regardless of his own life—to make an excursion from here to the zereba, and collect the transport boxes, water barrels, &c., scattered along the line of retreat of our poor unarmed and scared camel and mule drivers, who, on the first rush and surprise, were forced to desert their charges, seek some protection, make for some place of safety, and leave their costly articles of commissariat to the tender mercies of a temporarily victorious foe.

Many are the gunshot wounds amongst the wounded, yet the enemy are supposed to have but few rifles (Remington's), and these were secured at the defeat of Hicks's army; but those they possessed must have been used with an accuracy of aim and precision of fire unprecedented in the records of target practice; whilst the extraction of some Martini-Henry bullets from our men cannot be explained except on the presumption that the enemy are already in possession of a fair supply of these more modern, invaluable, and long-range weapons. Sunday's fight has already taught one lesson—that our camel and mule drivers must no longer be permitted to go without weapons, for one can well understand the hesitation (begotten of no spirit or unmanly fear) shown by these unarmed followers to accompany the force again, unless better protected on their flanks and in their rear, with the prospect of provoking a conflict in which they are certain to find themselves worsted by so active, so well armed, and implacable a foe.

To the chivalry of our own men alone can be ascribed the success of Sunday's fight, at one time so doubtful. Soudanese mothers, wives, and relatives have now to mourn the loss of about 2000 warriors, lying bleached and decomposed on that gory, trampled plain. Such are the results of this horrible war, and such the outcome of that religious fanaticism which carries these poor creatures to

their desperate fate, and urges them heedlessly on to their inevitable doom. But what of Christian chivalry, supposed to be so characteristic of our time and age? If it in any way influences men to do their duty whenever and wherever they may be sent, does it not also make them shudder at times, when called upon in the performance of that duty, to mow down in hundreds, nay in thousands, such brave misguided fanatics; because we are invading, they as patriots (they are in reality such) are defending their own country and her most uninteresting cause? England's bravest deeds in this unhappy land were well unwritten indeed; the best results, the most brilliant achievements, will carry little weight with them hereafter; and when sufficient blood has been poured out and treasure lost, the *finale* will be discouraging enough to stamp with a big blot those pages of England's military history in this sun-scorched land. Besides the 118 killed amongst our naval and military officers and men, about 300 or more of our Indian coolies and European mule and camel drivers and attendants are missing since the disastrous Sunday's engagement. About the fate of these poor fellows there can be but one opinion—all slain to a man. The enemy gives no quarter whatever.

But enough of this: let me for a moment turn to the brighter and philanthropic side of this dismal and bloody picture, and say a word or two about the sick and wounded. Being an eye-witness of what took place (down at the excellently arranged Base Hospital) on the Monday after the fight, I am able to show you every possible contingency was provided for; how faithfully a small band of skilful surgeons, under the direction of Brigade-Surgeon Tanner, provided for the reception and comfort on arrival of those stricken down in yonder plain; how, though these poor wounded men came into camp late in the evening, they were received with humanity and every possible care; how each medical officer during the previous afternoon had received a notification to have ready a supply of hot coffee and beef-tea, brandy-and-water to be given to each patient after being placed in nice clean soft beds. Nothing could be better than the arrangements made by the medical staff on behalf of the poor sufferers.

Up to this date, March 27th, since the establishment of the Base hospital at H redoubt, there have been 137 admissions; of this number 64 have been transferred to the *Ganges*, and five have died, three from wounds received in action and two from sunstroke. The rest remain under treatment. Of amputations performed, there have been four arms, four fingers, one thigh, and one leg. Of these only one has died after operation. The previous admission list does not include marines and sailors; of these twenty-seven have been received, one of them dying from gunshot-wound in the thigh. Up to date there have been eight cases of severe sunstroke, and of these, as before mentioned, two have died.

Before closing this letter I may mention that several of the Sisters under the superintendence of Miss Ireland have arrived, and are severally located at the Base Hospital, *Ganges*, and auxiliary depôt. They look remarkably well after their sea trip. Their presence seemed to quite cheer up the poor wounded and sick fellows. I sincerely trust they may stand this climate. Temperature in the shade 80°, in the sun 94°. The nights are cool and pleasant.

The following is the disposition of the medical staff:—

Surgeon-General O. Barnett, principal medical officer at Headquarters Camp.

Surgeon-General G. L. Hinde, superintendent at Base, H. Redoubt, and Quarantine Island.

Surgeon-Major J. Warren, sanitary officer, Headquarters Camp.

Surgeon-Major H. Tanner, sanitary officer, Base and H. Redoubt.

Surgeon-Major J. B. Hamilton, field inspector detailed for hospital organisation on line of communications.

Surgeon-Major H. Tobin, operating surgeon at Base and H. Redoubt.

Surgeon-Major A. Allan, registrar at Base and H. Redoubt.

Surgeon-Majors at Base Hosp., H. Redoubt: T. W. Patterson, J. G. Barrow, S. R. Cotter.

Surgeon-Majors at Stationary Field Hospital: H. H. Stokes, G. Carey, J. J. Cream.

Surgeon-Majors, Hospital Ship *Ganges*: H. Gribbon, E. F. Boult.

Surgeon-Majors at Guards' Hospital (their own): H. J. Lawrence, A. B. Meyers, C. C. Read. 4th Guards' Field Hospital: S. G. Robinson.

Surgeon-Majors and Surgeons to 1st Field Hospital: J. H. Shaw, F. Kingston, W. J. Bourke.

Surgeon-Majors and Surgeons to 2nd Field Hospital: J. Flemming, H. L. Donovan, R. Smith, S. G. Freyer.

Surgeon-Majors and Surgeons to 3rd Field Hospital: H. J. Riordan, H. Bates, H. N. Johnston, N. Maunders.

Surgeon-Majors and Surgeons to No. 1 Bearer Company: H. J. Wilson, J. R. Collins, C. Bert.

Surgeon-Majors and Surgeons to 2nd Bearer Company: E. J. H. Evatt, W. Keys, R. J. D. Hackett.

Surgeon-Major Cream (sanitary), at Base.

Sixteen other surgeon-majors and surgeons attached to their various regiments; also two naval medical officers doing duty on shore. In addition, Professor Ogston and myself.

The following cases, which came under the care of Surgeon-Major Samuel Kyle Cotter, are worthy of record:—

Gunshot Wound; Fracture of Arm; Amputation.—Private E. C——, Royal Marines, was wounded on March 20th by a bullet which passed through the middle of his left arm, shattering the bone upwards and downwards for about the space of four inches. On the 21st, under ether, examination revealed the hopeless shattering of the bone, and amputation was performed by Surgeon-Major Tobin at the junction of the middle and upper thirds. The temperature before operation was 99·1°, and soon after it fell to 98°. The operation was by anterior and posterior flaps, and the bone was sawn at about three inches below the head, up to which point splintering existed. A drainage-tube was placed through the wound at the outer angle, and the whole dressed antiseptically. He was restless all day, but the pulse did not rise beyond 88. At 9.30 P.M. one-third of a grain of morphia was injected hypodermically, and he passed a very fair night. On the morning of the 22nd the temperature was 99·2°, the pulse 96. Since the operation there had been difficulty in passing urine, and the catheter was required. In the evening of the 22nd the temperature was 99·8° and the pulse 93. On the 23rd the dressings were renewed, and the wound showed a tendency to heal by first intention. Temperature 99·2°; pulse 80; bowels confined. To have an enema of sulphate of magnesia at once. Catheter still required. In the evening of the 23rd the temperature was 100·2°, and the pulse 84, with a tendency to hardness.—24th: Temperature 99·2°; pulse 79, and hard. Not a good night; but little pain in the stump now. Evening temperature 100°; pulse 78; urine passed freely.—26th: Dressings and drainage-tube removed, and the stump again dressed under carbolic spray. Union by first intention established almost throughout. On this day he was cheerful and able to sit up, and was transferred in the evening to the hospital ship *Ganges*.

Sunstroke.—No. 73, Corporal (name unknown), Royal Engineers, contracted sunstroke during the action of the 20th of March, and was brought to the Base Hospital at 6 P.M. on the 21st. He lay speechless and still; the eyeballs turned somewhat upwards, the upper lids immovably elevated, and the pupils dilated to their fullest extent. At about 6.30 P.M. a convulsive attack came on, and he voided a most profuse quantity of thin, dark, grumous fæces, with a fœtor of the most intolerable character, the sickening odour of which was beyond description. The muscles of the chest, abdomen, and arms were affected by the convulsions, but not those of the back and legs. Though he lay perfectly straight and rigid, there seemed to be no opisthotonos. The convulsive attacks soon began to recur at short intervals, and a slight touch, merely, of the skin sufficed to bring them on. The hands eagerly grasped any article, and on attempting to withdraw it the grasp became stronger and the shaking and convulsion increased, whilst at the same time it is believed that he remained entirely unconscious. The bowels continued to discharge, and nearly a gallon of this grumous matter must have passed. Urine was drawn off with a catheter in immense quantity. The temperature was 103·3°, and later on rose to 104·5°, the pulse being all along about 150, and intermittent every fifth or twelfth beat. During the convulsions he screamed loudly. The convulsive attacks getting more prolonged, and interfering so much with respiration, inhalation of chloroform was resorted to. Under the use of this the convulsions ceased or were controlled, the pupils contracted to nearly their natural size, and the pulse became fairly full, slower and intermittent, but at long intervals. Two ounces of brandy were given and swallowed well; also beef-tea. At 1 A.M. on March 22nd the pulse began again to flutter and intermit. A sinapism was applied to the præcordiæ and epigastrium, and an enema of beef-tea and brandy administered. He continued to moan, but had no convulsions to speak

of. The pupils again became dilated, and most profuse sweat—not cold—bathed the whole body. He became unable to swallow, and sank at 3A.M. A case exactly similar occurred at the same time in the next tent, but the man died about two hours after admission.

LIVERPOOL.

(From our own Correspondent.)

THE PREVENTION OF CRUELTY TO CHILDREN.

Two years ago a Society was formed here for the prevention of cruelty to children, and its first annual meeting was held in March, 1884. Similar societies have since been formed in London, Manchester, Edinburgh, and Glasgow, all of which have adopted the rules of our local society. At the second annual meeeting of the latter, held on the 20th inst., it was stated in the report that, during the year, complaints had been dealt with by the Society involving the welfare of 844 children. Speaking generally, the cases were more those of gross neglect than of active and deliberate cruelty. In fourteen cases the parents were prosecuted and punished. The condition of the children in the streets of Liverpool has long been a reproach to the city, and it was hoped that the School Board would be the means of effecting an improvement. The evil was one, however, with which they had no power to deal; hence, the new Society has a noble work to perform, and it is being vigorously taken in hand. No class of men know how much unpunished cruelty to children goes on so well as medical practitioners, especially those who hold parochial appointments. These children by their miserable appearance excite sympathy, and with the money received from charitable persons often maintain their drunken and idle parents. A great effort is being made by the head constable to suppress mendicity, and when it is found to be unprofitable much of the present cruelty to children will cease.

COURTS OF LAW AND FETID ATMOSPHERE.

Mr. Justice Wills has severely censured the authorities in Manchester for the very inadequate arrangements made for the accommodation of prisoners awaiting trial. That which is provided in our local courts is superior to less modern courts, but it must be frankly admitted that the accommodation for witnesses is very deficient. Medical and other witnesses awaiting their turn to go before the grand jury are huddled together at the top of a staircase and along a corridor where the atmosphere is most vitiated. This ordeal passed, the medical witness has to choose between the corridors, the outside of the building, or the body of the court, the general waiting-room being quite out of the question. In the Crown Court itself the atmosphere becomes very vitiated even on a winter's day, and in summer time almost intolerable, except to those who are well acclimatised to it. The radical defect in our assize and police courts is a want of sufficent escape for foul air at the top of the building. It is not many years since the late Mr. Justice Heyes fell a victim to the polluted atmosphere of the court in which he had been presiding, and there can be little doubt that many an illness has arisen from being required to attend court as juror or witness.

THE STIPENDIARY MAGISTRATE AND CASES OF BITING.

At the police-court on Monday last, a respectably-dressed man, who had hitherto borne a good character, was charged with an assault upon a city constable, whose hand he had bitten, besides inflicting sundry bruises. The magistrate, on being asked by the prisoner's solicitor to deal summarily with the case, declined to do so, remarking that it was his determination to send all such cases to trial, "as cannibals deserved more severe punishment than he was able to award them."

CORONERS, MEDICAL WITNESSES, AND POST-MORTEM EXAMINATIONS IN WORKHOUSES.

The result of the Croydon Workhouse case will be watched with considerable interest by practitioners here as elsewhere. In the Liverpool Workhouse there are, on an average, at any given time, 2500 inmates. As may be readily understood, among such a number inquests will occur frequently in the course of the year, and the resident medical officers have invariably been paid for attendance and for making autopsies. To require them to undertake such additional work gratuitously would be manifestly unfair, as well as contrary to the understanding which regulates the acceptance of such appointments.

Liverpool, April 22nd, 1885.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

DURHAM UNIVERSITY.

CERTAIN important alterations were made at the late convention of this University in the regulations respecting the degree of Bachelor of Medicine. Henceforward every medical student will have to pass a preliminary examination in general knowledge, including the English language and history, arithmetic, geography, and Latin; and candidates for the degree of M.B. will have to be of the standing required for admission to the licence in Medicine, and must have fulfilled similar conditions as regards residence and attendance on lectures and hospital practice during four years.

THE PROPOSED FLOATING HOSPITAL FOR THE TYNE.

At a late meeting of the Tyne Commissioners notes were submitted in reference to the new floating hospital. The city engineer proposed to float it upon circular pontoons, placed ten feet apart, and surmounted upon a platform of iron and timber. These pontoons would be so arranged as to carry the platform about four feet above the water level. It was proposed to have three large wards, with ten beds each. The wards would of course be of wood, doubly lined. The roof would be of zinc or wood. Space was provided on the proposed platform for the future erection of the administrative block; but the cost would not be included in the present estimate. The cost of the hospital would be £4000.

THE NEW ETHOXO LIME-LIGHT.

At a late meeting under the auspices of the Northern Counties Photographic Association, held in the theatre of the Newcastle Literary and Philosophical Society, a paper was read upon the new Ethoxo Lime-light by the Rev. F. T. Hardwick, which is claimed to be equal in lighting power to the oxyhydrogen light, and more safe and convenient. A letter was read from Professor Herschell testifying to the safety of the improved ethoxo light under tests of exceptional severity. Mr. Hardwick showed slides of insect life, &c., by aid of this light, and his demonstrations were admitted to have been very interesting and successful.

THE WATER-SUPPLY OF NEWCASTLE.

Some of our local papers are pointing out that the water-supply to our Tyneside towns is beginning to take a rather serious aspect. The population supplied by our waterworks is 770,000, and it is calculated that we have only 900 million gallons in store, against 2000 million gallons at the same period last year. At this rate our store will be exhausted in four months—that is, by the end of July. Of course we have the Tyne to fall back upon, but this source is open to many objections, and at present it is only pumped to meet trade demands. It is to be hoped that "a great many things may happen" before we have to resort to the Tyne for drinking purposes.

PRISONERS DYING IN GAOL.

The death of a prisoner under sentence, perhaps for some comparatively trivial offence, always produces a painful sensation. A case came before the coroner at Durham lately, in which a prisoner convicted of begging under false pretences died in gaol, after the expiration of his sentence. It was shown that on admission he was examined by the prison surgeon, who, finding him in an advanced state of pulmonary consumption, had him removed to the hospital in the gaol. He became gradually worse, and although his sentence had expired and it was intended to remove him to the workhouse, he succumbed to the disease before this step could be carried out. It was shown at the inquest that everything possible had been done for him from the first; still the coroner pointed out that this was another case which showed the necessity of there being some other place than a prison for the reception of dying persons convicted of crime. Another point was alluded to—namely, that the

Durham prison is too far away from the railway station for weakly people, and that there is no prison van for their conveyance. Cases have occurred of prisoners dying soon after admission to the gaol.

Newcastle-on-Tyne, April 21st.

EDINBURGH.

(From our own Correspondent.)

MEETING OF EDINBURGH UNIVERSITY GENERAL COUNCIL.

THE statutory half-yearly meeting of the General Council was held on Tuesday, the 21st instant. Lord Inglis, the Chancellor of the University, presided, and was supported by the Principal, Sir William Muir, and several of the professors. The whole interest of the meeting centred in the question of University reform, and there were several motions on the orders of business which had reference to the Universities (Scotland) Bill, 1885. The first was moved by Mr. Taylor Innes, Advocate, approving the general scope and principle of the Bill, and proposing to petition Parliament in favour of its early passage into law. In bringing forward this motion, Mr. Innes said that, in his opinion, there were clauses in the Bill which would require amendment in passing through committee, but that it should be supported, as it provided for many useful reforms, amongst which he might cite the scope of those clauses which endow the Commissioners under the Act with powers of adding to the functions of the General Council and increasing its power, of further developing the range of extra-mural teaching, and of providing for the University education of women. Amidst loud expressions of varied opinion on this point, Mr. Innes expressed the hope that the University curricula would soon be thrown open to the other half of the human race. He also drew attention to the fact, that in the present Bill the finality clause as regards the limitation of Government support to Scottish Universities has been abandoned, and this he urged as an additional reason for supporting the Bill as at present drafted. Mr. McKie proposed an amendment, approving the clauses which increase the powers of the University Court and the General Council, but opposing the Bill as a whole unless greatly modified. The amendment was rejected, and the motion carried by a large majority. Professor Laurie brought forward a motion urging upon the Government the reconsideration of the clauses which transfer the Observatory and Botanic Gardens to the University, providing for the payment of pensions by the Senatus instead of by the treasury, and transferring the patronage of bursaries from various private individuals and corporate bodies to the Senatus. After prolonged discussion this motion, with a slight modification, was agreed to. Professor Masson then opened a discussion of some importance upon the question of an increased teaching staff within the University itself. At the meeting of Council held last October a general motion in favour of increased facilities for extra-academical teaching had been adopted; and the present motion, while conceding the importance of that element, urges that attention should also be paid to a scheme for greatly enhancing the teaching power of the University within its own economy by adding to the numbers of its teaching staff. This, Professor Masson thinks, should be carried out on the German *privat docent* system; and he advocates an advance in the status of assistants to professors, and of their emoluments, as the best means of accomplishing this object. Mr. Scott Dalgleish proposed an amendment reaffirming the position taken by the Council in the matter last October. An animated discussion ensued, followed by a division, when the amendment was declared to be carried by 26 votes to 22. Several members present abstained from voting. This result was largely due to the vote of the medical graduates present, many of whom are themselves engaged in extra-mural teaching in the Edinburgh Medical School, and who view with distrust any proposals tending to diminish the importance which the extra-academical school at present possesses in relation to medical teaching in Edinburgh.

SUPERANNUATION.—Mr. Arthur Priest, late medical officer for the Waltham Abbey district, Edmonton Union, has received a superannuation allowance of £71 8s. a year.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

As the undergraduates of the University of Dublin have been granted a term, a memorial is about to be presented to H.R.H. the Princess of Wales, praying that she may be pleased to ask the Senate of the Royal University to grant a similar favour to the undergraduates of this University. Honour students will not feel this concession, if granted, in any way a hardship, as they will, as usual, have the right to compete for exhibitions. Steps are being taken to place the matter under the Royal notice before the return to England.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

At the last meeting of Council the President read a letter from Dr. Cameron, the Vice-President, stating that, having suggested the idea of erecting a marble statue to Mr. William Dease in the College, Mr. M. O'Reilly-Dease, D.L., a grandson of the celebrated surgeon, had offered to defray the entire cost of erecting the monument, and had given him (Dr. Cameron) *carte blanche* to make all the arrangements. We understand Dr. Cameron has selected Mr. Thomas Farrell, the eminent sculptor, to carry out the work, which will at once be commenced. On the motion of Mr. Colles, seconded by Sir G. H. Porter, Mr. O'Reilly-Dease's generous offer was thankfully accepted.

ALTERATION OF IRISH PRISONS RULES.

By an Order in Council the Lord-Lieutenant has approved of certain rules made by the General Prisons Board for Ireland in relation to the duties of surgeons to prisons. These are as follows:—1. That no irons or means of mechanical restraint shall be used, excepting such as are approved by the Lord-Lieutenant, or such as may be considered necessary by the medical officer to be used as medical appliances in the case of violent prisoners in hospitals. 2. The surgeon shall visit the prison once each day, and not later than 12 o'clock noon, and oftener if necessary; and shall see every prisoner in the course of the week. He shall daily visit the prisoners, if any, confined in punishment cells or under punishment in their own cells, or under mechanical restraint; and he shall visit daily, and oftener if necessary, such of the prisoners as are sick, and when necessary shall direct any prisoner to be removed to the infirmary. 3. The surgeon shall, whenever he considers a prisoner's life to be in danger by further confinement, at once report the fact to the Under Secretary for the Lord-Lieutenant's information, and also to the General Prisons Board and to the governor; and he is also to report to the governor the case of any prisoner to which he may think it necessary, on medical grounds, to draw attention.

THE TREATMENT OF INTERNAL ANEURYSM.

In a paper read by Professor Finny at the last meeting of the Pathological Section of the Academy of Medicine in Ireland, the treatment advocated by Mr. Tufnell of Dublin was highly recommended. Mr. Tufnell, who was present, made a very interesting communication in reference to his treatment in cases of internal aneurysm, and particularly insisted on rest in the horizontal position for a considerable time as a most important element in these cases. He referred to two cases of well-marked abdominal aneurysm, the subjects of which were now in excellent health, one after five years, and the second after seven years, since his mode of treatment had been used.

Dublin, April 21st.

PARIS.

(From our Paris Correspondent.)

THE NATURE OF THE CURVED OR COMMA BACILLI.

AT the meeting of the Académie des Sciences last week Professor Richet read a paper, in the name of M. J. Héricourt, on the nature of the curved or comma bacilli and on the presence of their germs in the air. The following are the conclusions of the author:—1. In all waters, whatever be their quality or origin (springs, drains, wells, cisterns, &c.), there exist curved bacilli of variable forms and dimensions,

among which those of the type that are described as choleriform are constantly found. 2. The curved bacilli do not exist in the atmosphere under their characteristic form; they are there found in a state of germs, under the form of spores. 3. The intestinal dejections in simple diarrhœa, as well as in dysentery and typhoid fever; the broncho-pulmonary secretions in the various diseases of the lungs, in pus exposed to the air, human saliva, whether normal or abnormal—all substances, in fine, that are susceptible of serving as nutriment to germs or bacteria, contain curved bacilli. 4. These curved bacilli are strongly aërobied, and it is only at the surface of liquids that they are to be collected. They are very mobile. They are agitated by rapid oscillations, exactly similar to those of vibriones, and are endowed with a strong power of refraction. They are about half or two-thirds of the length of the bacilli found in tuberculosis, and are thicker and less regular than the latter. Nothing differentiates them from the bacilli that are found in the dejections of cholera patients. 5. In awaiting inoculations more conclusive of their pathogenic *rôle* being performed with the comma bacilli collected in the intestines of cholera patients, the conclusion to be drawn from the propositions that precede is that these micro-organisms are the same as those that are found in all secretions, whether normal or pathological, on the only condition that these secretions have been found in contact with water in which the curved bacilli are the habitual occupants, or with the air which conveys their germs.

THE REMOVAL OF A CANCEROUS KIDNEY.

Wishing to know the cause of the omission on the part of Dr. Péan to state whether the operation of gastrotomy, referred to in my letter of the 11th inst., was performed under the influence of chloroform or other anæsthetic, or whether antiseptics were employed or not, I wrote to him on the subject, and received for answer, "Inutile de vous dire que je soumets à l'anesthésie chloroformique toutes les malades auxquelles je pratique la gastrotomie, et que je me contente, à la suite de l'opération, de l'appareil ouaté compressif et du pansement par occlusion de Chassaignac comme je l'ai fait depuis 25 ans, sans autre précaution antiseptic. J'ai rejeté depuis longtemps le 'spray' comme étant plus dangereux qu'utile dans ces sortes d'opérations." I may here add that the patient who was the subject of Dr. Péan's communication was herself presented to the Academy of Medicine. She was thirty-six years of age. She also formed the subject of a clinical lecture by Dr. Péan, which will be found embodied in vol. iv. of his "Cliniques de l'Hôpital Saint Louis," about to appear. The lesson taught by this case is, according to the author, that in the presence of large malignant tumours of the kidneys, the course of which is not hyper-acute, one should not despair of cure. I may here also add that in the case under notice it was the right kidney that was removed.

MM. CHARLES ROBIN AND CORNIL.

By a special decree in their favour MM. Charles Robin and Cornil, Senators, have been allowed to retain their respective positions at the Faculty of Medicine of Paris, the former as Professor of Histology, and the latter as Professor of Morbid Anatomy.

Paris, April 21st.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: The undermentioned officers are granted retired pay, with the honorary rank of Deputy Surgeon-General:—Brigade Surgeon William Gerard Don, M.D., Brigade Surgeon Samuel Stacy Skipton, M.D. The undermentioned officers are granted retired pay with the honorary rank of Brigade Surgeon:—Surgeon-Majors James Edward Clark, William George Ross, M.D.; John Anderson, C.I.E.; George Francis Dooley, Eugene Robert O'Brien, M.D.; and John Norman Davis, M.D.

INDIAN MEDICAL DEPARTMENT.—Deputy Surgeon-General Michael Cudmore Furnell, M.D., F.R.C.S., Sanitary Commissioner, Madras, has been appointed Surgeon-General with the Government of Madras; Deputy Surgeon-General George Bidie, M.B., C.I.E., has been appointed Sanitary Commissioner, Madras; Surgeon Hazlett Allison, M.D., has been appointed Assistant Physician, Madras General Hospital; Brigade Surgeon J. McN. Donnelly, M.D., has been promoted to be a Deputy Surgeon-General, with permanent rank.

ADMIRALTY.—The following appointments have been made:—Surgeon Francis H. Julyan, to the *Triton*, additional; Fleet Surgeon James Trimble, to the *Asia;* Staff Surgeon James Robertson, to the *Conquest;* Fleet Surgeon Robert Nelson, to the *Thunderer;* Staff Surgeon Michael Fitzgerald, to the *Orion;* Surgeon Edward G. Swan, to the *Thunderer;* Surgeon Denis W. Donovan, to the *Alexandra*, additional. Staff Surgeon William Henry Stewart, M.B., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet.

YEOMANRY CAVALRY.—Middlesex: Surgeon Thos. William Thompson resigns his commission.

MEDICAL NOTES IN PARLIAMENT.

The Poisons Bill.

IN the House of Lords on the 20th inst., Lord Carlingford having moved that the Poisons Bill be referred to a Select Committee, the Earl of Milltown, who had given notice that on the motion for going into Committee on the Bill he would move, "That the House resolve itself into Committee on the Bill this day six months," said he felt very strongly that a measure on this subject was necessary, right, and proper. At the same time, however, he was of opinion that the Bill now before their lordships was not a good one, and that it was extremely likely to harass and hamper legitimate trade. It had been brought forward without any reference to the interests of the trade or to the interests of the public, and on that ground he appealed to the noble lord some time ago to refer it to a Select Committee. The noble lord had now done so, and he would, therefore, withdraw his notice on the paper. The motion was carried.

The Expenditure of the Eastern Hospitals.

In the House of Commons on the 20th inst., Mr. G. Russell, in reply to Baron H. De Worms, stated that the Local Government Board had been asked by the Metropolitan Asylums Board and several Boards of Guardians to institute an inquiry into the expenditure of the Eastern Hospitals, and the inquiry has been intrusted to three of the Board's inspectors, Mr. Hedley, Dr. Bridges, and Mr. George Taylor.

Pauper Lunatics.

On the 21st inst., Mr. G. Russell, in reply to Mr. J. Talbot, said the question of detaining pauper lunatics in workhouses, in view of the recent decisions of magistrates on the subject, was being considered in connexion with the Lunacy Bill which had been introduced into the House of Lords by the Lord Chancellor.

The Health of the Troops in the Soudan.

The Marquis of Hartington, in reply to Sir F. Milner, said that from the circumstances under which our forces were now placed in the Soudan, it was scarcely possible to state the exact percentage of sickness. On the whole, however, the health of the troops was reported to be good. They had not received any accounts showing that an extraordinary amount of suffering prevailed among the troops on the Nile. All the arrangements for the accommodation of the troops were made locally. Large supplies of clothing and other requisites had been sent out, but it would be impossible to state how far the means of transport at the disposal of the authorities in Egypt enabled them fully to reap the advantage of such arrangements.

Private Lunatic Asylums (Ireland) Bill.

On the 22nd inst. Mr. Corbet moved the second reading of this Bill, the object of which, he said, was gradually to get rid of private asylums kept for pecuniary profit, which was reported to be at the root of all the evils connected with private asylums in Ireland. Mr. Campbell-Bannerman said that the Government had introduced into the other House a Bill dealing with the subject of lunacy on different lines from this Bill, and it would be impossible to be legislating at the same time upon one system in the other House and upon another system in this House. He knew and admitted all that could be said in favour of doing away with private asylums; at the same time to get rid of them in a summary way would raise large questions of compensation. The hon. member assumed that asylums would be self-supporting if they were erected, but money would be required to erect them. The hon. member said he would get it from the

Church Fund Surplus; but to the best of his belief there was nothing to be obtained from that source. The Bill was lost by a majority of thirty-five.

Mr. Acland moved the second reading of the Public Health (Members and Officers) Bill, which after some discussion was read a second time.

Obituary.

OSWALD GEORGE DYX BRADSHAW, M.R.C.S., L.R.C.P.

THE death of Surgeon Bradshaw at Korti, March 13th, 1885, from enteric fever, has created a feeling of the deepest regret. He was beloved and respected by all with whom he had occasion to become associated, and, though but a young man, his professional and social merits had secured for him a large circle of friends. He was the youngest son of the late Capt. L. A. Bradshaw, Royal Artillery, and was born in 1859, at Secunderabad. He was educated at Wellington College, and entered the British Medical School in 1876; subsequently becoming a student at St. George's Hospital in 1878. At the latter institution he obtained the Brackenbury prize in medicine, and passed first in the Army Medical Service at the August examination, 1883. At Netley his career was marked by the same devotion to work, and he was rewarded by gaining the Martin Memorial Gold Medal for proficiency in Military Hygiene, and the Director-General's Prize for Pathology. In September, 1884, he obtained his commission, and sailed for Egypt, where he was actively employed at the front, and was untiring in his care of the sick. The fever was probably contracted by the bad water and fatigue incident to a long march across the desert. In him the service has lost a brave and faithful officer, the profession a useful member, and his friends a genial and pleasant companion.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following candidates passed the Primary Examination in Anatomy and Physiology for the diploma of Member of the College at a meeting of the Board of Examiners on the 8th inst.:—

ANATOMY AND PHYSIOLOGY.—Joseph Beadle, Newcastle and Glasgow; G. Hamerton Rowlands, O. Taunton Stephenson and Charles W. Graham, Liverpool School of Medicine; J. Price Williams, Percy Ashworth, Herbert Wade, and Arthur M. Cass, Manchester; George A. Ferraby, W. Matthew Joyce, and Leslie Whitehead, Birmingham; T. Mayo Stiles, G. Henry Skinner, P. Horace Hudson, and Frank Calden, Bristol; Percy R. Gostling, T. H. Fencott Evans, A. Knight Holt, and Edwin C. Palmer, St. Bartholomew's; Herbert J. Roper, J. Arthur Smith, and Henry Goot, Leeds; Patrick Hehir, Edinburgh and Calcutta; P. J. Mader, Edinburgh; M. Mitchell Bird, St. Mary's; William Branson, Sheffield; George Cherry, Toronto.

ANATOMY ONLY.—Lewis L. Bailes, Newcastle; A. Dunley Owen, Bristol; W. Matthews Joyce and J. Hazlewood Clayton, Birmingham; A. Morton Barford, St. Bartholomew's.

(Candidates referred for three months, 5; six months, 4.)

Passed on the 10th inst.:—

ANATOMY AND PHYSIOLOGY.—W. Rickward Bazot, R. William Boyce, University College; Christopher P. Spink, W. Barker Russell, and H. Clifford Baldwin, Leeds; M. Prentice Ledward and J. Harwood Wilson, Manchester; A. Edward Leitch, J. Hepworth Shaw, G. William Chaster, W. Edward Livesey, and J. Webster Shannon, Liverpool; E. Lyall Haynes, L. William Andrews, L. Emilius Jowers; Thomas Lissaman, T. William Kelly, and B. A. Farrar, St. Bartholomew's; J. W. B. Pogson, R. Alfred Sadler, G. T. Congreve Barber, and H. Wynne Thomas, Birmingham; J. Smith Bootiman, Newcastle; John Stokes, Sheffield; G. Herbert Pennell, Guy's; W. M. F. Nelson, Montreal; H. Stanfield Collier, St. Mary's; Benjamin Walker, London.

ANATOMY ONLY.—B. Hamilton, Bristol; A. E. D. R. Peters, St. Bartholomew's; J. A. Eyton-Jones, Liverpool; J. E. Foster, Birmingham.

PHYSIOLOGY ONLY.—R. B. Smith and J. W. Whitehead, Manchester.

(Candidates referred for three months, 6; six months, 2.)

Passed on the 11th inst.:—

ANATOMY AND PHYSIOLOGY.—W. Arthur Hooton, Richard Alcock, J. Watson Lonsdale, and J. F. Woodyatt, Manchester; F. H. Whitehead, Charing-cross and Manchester; J. Houghton White, Ernest Crompton, Henry Huxley, and W. Edmund Hardy, St. Bartholomew's; T. Wiltshire Robbins, London; Ferbert R. Buswell, Middlesex; G. E. Kennie, University College; Basil W. Houseman, Charles St. Johnston, Samuel Nicklin, and Ernest H. Snell, Birmingham; Felix Kerans, Liverpool; J. V. W. Rutherford, Edinburgh; Joseph J. Wheeler and W. Job Maillard, Guy's; Frederick Lace, Bristol, Arthur Miers, Leeds.

ANATOMY ONLY.—George Thorpe, Sheffield; Arthur W. Hogg, St. Bartholomew's; Abraham J. Meuer, New York; Percy J. Spencer, London; Hubert Joslen, Guy's.

PHYSIOLOGY ONLY.—Herbert Burland, Manchester; F. S. Jermaine-Ladham, St. Bartholomew's; H. Cecil Nicholls, Charing-cross; Evan Jones, London.

(Candidates referred for three months, 2; six months, 2.)

Passed on the 13th inst.:—

ANATOMY AND PHYSIOLOGY.—R. Oxley Bowman, Jabez D. Windle, Daniel Booth, W. Leonard Bentley, R. Ernest Smith, and Arthur E. Giles, Manchester; G. Arbuthnot Robinson, London; Robert Bird, C. Stanstay Edwards, J. G. Ernest Colby, W. Norman Evans, John Rust, and T. William Francis, St. Bartholomew's; Henry J. Campbell and Morgan J. Morgan, Guy's; Frederick W. Stokes, Birmingham; Eric E. Kershaw, and M. Percy Cooke, Middlesex; Francis Naumann and Albert W. Cooke, Charing-cross; Richard F. Brooks, King's College; Stanwell Weldon and John Wayte, St. George's; W. Ap Samuel J. Graham, St. Mary's; T. Arnold Durrant, St. Thomas's.

ANATOMY ONLY.—William Rennie and J. Hurd Gordon, Birmingham; William Mortimer, London.

PHYSIOLOGY ONLY.—F. Cubbon Rogers, Manchester; C. L. S. James, London; A. F. Bilderbeck-Gomes, St. George's; Percy V. Dodd, St. Bartholomew's.

(Candidates referred for three months, 6; six months, 4.)

Passed on the 14th inst.:—

ANATOMY AND PHYSIOLOGY.—H. C. Lesser Arnim and Robert May, Charing-cross; Prideaux G. Selby, E. T. Mosse Tunnicliffe, A. Lindsay Travers, John W. Applegate, and A. Leonard Bright, St. Bartholomew's; H. C. Bristowe, R. Jackson Langley, R. Vaughan Solly, and E. Charles Mahany, St. Thomas's; H. E. Drake-Brockman, R. Staker Turton, and Beaumont H. Comerford, St. George's; James Wigg and J. H. E. Jarvis, London; Charles H. Buckley, James P. Walker, and George A. Berry, Manchester; Herbert E. Cuff, Guy B. Smith, and John D. Cruickshank, Guy's; C. Herman Verman, University College; Howard P. Ward, King's College; W. Baron Cockill, Middlesex.

ANATOMY ONLY.—T. Owen Raw and Astley C. Roberts, Guy's; T. Alexander Murray, Manchester; M. Bayfield Dumaresq, London; Ernest Dawson, Westminster; James Daniel Brown and Cyril W. Shaw, St. George's; Alfred Bowles, University College.

PHYSIOLOGY ONLY.—P. Seymour Harris, Middlesex; W. Douglas Gimson, St. Bartholomew's; Lionel N. Hoyated, Charing-cross; Frank Elias, University College; G. W. B. Daniel, St. George's; George A. Slack, Guy's; Arthur Crook, London.

(Candidates referred for three months, 6; six months, 2.)

Passed on the 15th inst.:—

ANATOMY AND PHYSIOLOGY.—J. Auriol Armitage and T. Hamilton Ward, Edinburgh; J. George Carter, Charing-cross; Walter J. Bearblock, Walter Fisher, Joseph C. Baines, Ernest H. Starling, J. Vincent Blachford, and J. Low Aymard, Guy's; J. Llewellyn Rees, G. Gordon Parsons, and W. Burwell Darroll, London; E. Courtney Lomas, Marmaduke Bannister, Harvey Rhodes, and A. Baxendell, Manchester; E. A. Griffiths Dowling, Frank E. Gibbens, and George Heaton, St. Bartholomew's; H. Bryan Densham, Bristol and Edinburgh; W. Henry Vickery, R. Francis Thomas, and C. Lloyd Worrell, Middlesex; G. A. T. Bray and R. James Carter, King's College; E. Deanesley, University College; J. T. Bays, St. Mary's.

ANATOMY ONLY.—Walter S. Holford, St. George's; Harold Birkenhead, Manchester; T. Edward Pallett, Westminster; W. Wheldon Williams, University College; Jasper J. Garmany, Bellevue; James E. Brown, Toronto.

PHYSIOLOGY ONLY.—W. John Midelton and H. Y. Whitchurch, St. Bartholomew's; J. Wilkins, London; Malcolm E. H. Wale, St. George's; J. Douglas Cree, Middlesex; H. Foreman Cartmil, Manchester; Norman Davis, Newcastle; William Jones, University College.

(Candidates referred for three months, 4; six months, 1.)

At the recent Primary or Anatomical and Physiological examinations for the diploma of Membership of the Royal College of Surgeons, 387 candidates presented themselves. Of these 148 were referred.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following candidates passed the Second Examination (Anatomy and Physiology) on the 11th inst.:—

O. Le Mare Theobald, Walter Lovett Hubbard, H. H. Brodie MacLeod and Ernest A. W. Armstrong, King's College; Arthur W. James and W. P. Peake, St. Bartholomew's.

Passed on the 13th inst.:—

Herbert A. Smith and Edgar R. White, King's College; William Woodward, St. Bartholomew's.

UNIVERSITY OF ABERDEEN.—At the late medical graduation term, the following candidates, after the usual examination, received degrees in Medicine and Surgery:—

DEGREE OF M.D.

Brown, Clarence W. Haig, M.B., C.M., Godalming, Surrey.
Campbell, Alexander, M.B., C.M., Dundee.
Collie, Robert John, M.B., C.M., Aberdeen.
Cooper, William, M.B., C.M., Belhelvie.
Crow, Herbert William Tolver, M.B., C.M., London.
Gayton, Francis Carteret, M.B., C.M., Surrey County Asylum, Woking.
Hosie, Andrew, M.B., C.M., Inverness District Asylum.
MacLean, Alexander, M.B., C.M., Deputy Surgeon General, Thurso, Caithness.

Stewart, William H., M.B., C.M., H.M.S. *Clyde*, Aberdeen.
Stuart, William, M.B., C.M., Stratton, Cornwall.

DEGREES OF M.B. AND C.M.

†Alcock, Alfred William, Bombay.
Anderson, John, M.A., Marnoch.
Brown, David MacDonald, Banchory-Ternan.
Butchart, Charles Alexander, Aberdeen.
Connan, Alexander Gray, Aberdeen.
Cowan, Andrew Hunter, Aberdeen.
†Davidson, John Stuart, Mauritius.
Deane, E. Greaves Wooding, Barbadoes, West Indies.
Duncan, John, M.A., Aberdeen.
†Godfrey, Henry William, Hornhurch, Essex.
Gunn, James William McKenzie, M.A., Reay, Thurso.
Henderson, Albert Edward, Sheffield.
Irvine, John Charles Davidson, Udny.
†Jones, Francis Grice, Denbigh, North Wales.
*Lamb, John Marshall, M.A., Aberdeen.
Marsden, John, Banff.
*Milne, Alexander, Huntly.
†Milne, James Black, Huntly.
Morgan, William Vincent, Narberth, Pembrokeshire.
†Paterson, Thomas George, New Galloway.
*Rattray, Patrick Whyte, M.A., Aberdeen.
Scott, George, Aberdeen.
Simpson, David, M.A., Alvah, Banff.
Simpson, William Bulmer, Bedale, Yorkshire.
*Smith, Arthur Greatorex, Marlborough.
Sullivan, Peter Alfred, Carlisle.

* Highest Academical Honours. † Honourable Distinction.

The John Murray Medal and Scholarship was awarded to

Patrick Whyte Rattray, M.A.

The following were certified as having passed all the examinations, but did not graduate:—

Charles Mitchell Aird, Leslie Durno, James Murray, Cecil Robertson, and John Hutton Stenhouse.

The next Professional Examination for degrees in Medicine commences on July 18th.

COLLEGE OF PHYSICIANS IN IRELAND.—At the April examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Robert Blackwell, Thomas J. Dillon, William Dillon, Andrew A. Doyle, Richard Herbert Joseph Fetherston, James Heffernan, Samuel Hornock, John Lowney, David Charles Morgan Lunt, John McFadden, Joseph Daniel McFeely, Edmond Ryan MacMahon, Septimus Palmer, Paul A. Piel, Joseph Robinson, Herbert Shackleton, Henry Barlow Strong, Hamilton James Thornbury, Richard Henry Tallour, Everard Woods.

MIDWIFERY.—Robert Blackwell, William Dillon, Richard Herbert Joseph Fetherston, David Morgan Lunt, John McFadden, Joseph Daniel McFeely, Paul A. Piel, Joseph Robinson, Hamilton James Thornbury, Everard Woods.

The undermentioned were admitted Fellows:—

A. H. Horne. | F. X. MacCabe.
James Pollock.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 9th inst.:—

Cockerill, John W., St. Bartholomew's Hospital.

Passed on the 16th inst.:—

Carless, Albert, King's College.
Crowdy, F. Demainbray, St. Thomas's Hospital.
Rattray, Alexander, Edinburgh University.
Warner, Frederick Ashton, St. George's Hospital.

WE are asked to state that the Press Information Agency is now a Limited Liability Company.

MR. JOSEPH CROSSLAND, local banker and manufacturer, has given £1000 to the Huddersfield Infirmary for the establishment of a children's ward.

THOMPSON MEMORIAL HOME, LISBURN.—This institution has just received the very handsome donation of £10,000 from a relative of the late Dr. Thompson.

ON the 18th inst., the Kent justices decided to build an infectious diseases hospital at the County Lunatic Asylum at Chartham, near Canterbury. The cost will be £2500, or about £125 per bed.

THE Corporation of Cork have passed a vote of thanks to Dr. Donovan for his exertions, in conjunction with his staff of assistants, in grappling with, and stamping out, the epidemic of small-pox in that city.

EPSOM COLLEGE.—The Rev. Dr. West will retire at the end of Easter Term from the Head Mastership of the Medical College at Epsom, which he has held for fifteen years; and the Council have appointed the Rev. W. Cecil Wood, M.A., as his successor. Mr. Wood, who is now Head Master of Birkenhead School, has had much experience in important public schools, and especially at Wellington College, where he was a master for eight years.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.—The annual general meeting of this Association will be held on Tuesday, May 5th, at 4 P.M., in the Westminster Town Hall, Dr. Danford Thomas in the chair. All members of the College are invited to attend.

AMERICAN PRECAUTIONS AGAINST CHOLERA.—The *Liverpool Journal of Commerce* says that the United States Government is taking early precautions against the introduction of cholera into their country. Orders have been issued by the American Consul at Liverpool that he must have twenty-four hours' notice of the sailing of any vessel to the United States, in order that it may be subject to sanitary inspection by officers specially appointed for that purpose.

PADDINGTON-GREEN CHILDREN'S HOSPITAL.—The report, which was read at the second annual meeting of the contributors to this hospital on the 16th inst., stated that 288 in-patients had been admitted during the year; 9356 new out-patients were treated, the total attendances being 29,328, or an increase of 10,669 over those of 1883; 398 casualty cases also received attention. The yearly expenditure is about £1700, towards which there is a subscription list of £679. During 1884 a sum total of £258 was subscribed by the working-men of the district.

CITY OF LONDON TRUSS SOCIETY.—The seventy-eighth annual festival in aid of this Society was held on the 21st inst., the Lord Mayor presiding. Since the charity was established in 1807, more than 406,000 patients of all ages and both sexes have been relieved, the number in the first year being 227, and last year 9248. In 1884 the regular annual subscriptions amounted to £1843, new and additional subscriptions to £144, life subscriptions and donations to £902, legacies to £1868, and extra by governors for letters £103. During the evening subscriptions amounting to £530 were announced.

VICTORIA UNIVERSITY.—At a meeting of the Court of this University last week, Professor Rendall moved the following resolution, which was approved:—"That any registered medical practitioner who shall have qualified to practise medicine or surgery prior to January 1st, 1885, shall be permitted to enter for the intermediate and final examinations for the degree of Bachelor of Medicine without having previously passed the entrance examination in arts or the preliminary examination in science, provided that all other requirements for admission to the intermediate and final examination have been duly complied with."

SANITATION AT BEDFORD.—An action was recently brought against the Mayor and Corporation of Bedford for cutting off the connexion between the drains of the plaintiff's houses and the main sewer. The Corporation, in defence, alleged that the plaintiff covered in his drains without notice to their surveyor to afford him an opportunity of inspecting them; that "it is most important in the interests of the public, and is, in fact, absolutely essential for sanitary purposes, that the corporation surveyor should have an opportunity of inspecting the drains of houses and their connexions with the main sewer before they are covered in;" and that the plaintiff was duly required in writing to uncover them for inspection, which he refused to do. Evidence having been given as to the faulty construction of the drains, judgment was given for the defendants.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRAMWELL, HUGH RANSOM, M.B. & C.M.Ed., has been appointed Resident Physician to the Royal Infirmary, Edinburgh.

CLARK, WILLIAM THOMAS MARSTON, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health to the Twickenham Urban Sanitary District; Surgeon to the Loyal Orleans Lodge of Oddfellows (Manchester Unity); Surgeon to the Waldegrave Lodge of Oddfellows (Manchester Unity); Surgeon to the Boys' Home, Twickenham; Surgeon to the Twickenham Provident Dispensary; and Surgeon to the Twickenham Lying-in Charity.

CROSSFIELD, ARTHUR KYFFIN, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Thirteenth District of the Tolnes Union, vice Stone.

CUNNINGHAM, PETER HANNAH, M.B., C.M.Glas., has been appointed Government Medical Officer for the Shire of Majorca, Victoria.

GRIFFITHS, WILLIAM CHARLES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Conwil Rivet District of the Carmarthen Union, vice Lloyd, resigned.

GUINNESS, THOMAS ARCHIBALD, L.K.Q.C.P.I., M.R.C.S., has been appointed Medical Officer for the Bampton District of the Tiverton Union, vice Nason, resigned.

IRVING, JOHN CHRISTOPHER, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Billinghay District of the Sleaford Union, vice Thompson, resigned.

LLOYD, MORGAN, L.R.C.P.L., M.R.C.S., has been appointed Medical Officer for the Llangendeirne Upper District of the Carmarthen Union, vice Timmins, resigned.

MCHUGH, MICHAEL, M.B.Dub., L.R.C.S.I., has been elected Assistant-Physician to St. Vincent's Hospital, Dublin.

MCKEE, JAMES CHARLES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Health Officer for the Borough of Raywood, Victoria.

PARRY-JONES, M., M.B., B.S.Lond., M.R.C.S., has been appointed Resident Medical Officer at the City of London Hospital for Diseases of the Chest, Victoria-park, E.

PESKETT, ALFRED F., M.R.C.S., L.S.A.Lond., has been appointed Resident Accoucheur at the London Hospital.

PIKE, JOSEPH BALM, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Loughborough District and Workhouse, Loughborough Union, vice Palmer, resigned.

SOUTER, JOHN CLEMENT, M.D., C.M.Aber., has been appointed Government Medical Officer and Vaccinator at Murrumburrah, New South Wales.

STEPHENS, CHARLES, L.R.C.S.Ed., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the Stow Union, vice Ebden, deceased.

STOKES, ALFRED WALKER, F.C.S., has been appointed Public Analyst for St. Luke's Parish, vice Pavy, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CHETWOOD.—On the 16th inst., at King-street, Finsbury-square, the wife of William Chetwood, M.R.C.S., of a son.

GIBSON.—On the 21st inst., at Stanley House, Blackstock-road, Finsbury-park, N., the wife of Dr. J. C. Gibson, of a son.

SMITH.—On the 19th inst., at Christ's Hospital, London, the wife of Alder Smith, M.B., F.R.C.S., of a daughter.

WEATHERHEAD.—On the 30th ult., at Fairview Ranch, Boorne, Texas, the wife of J. P. Weatherhead, M.R.C.S., of a daughter.

MARRIAGES.

BURCHELL—EVANS.—On the 9th inst., at the Parish Church, Aldeburgh-on-Sea, Suffolk, Peter Lodwick Burchell, M.B.Lond., F.R.C.S.Eng., to Emily Anne Frances, widow of T. H. Evans, Esq., second daughter of the late William Webber, F.R.C.S.Eng., and granddaughter of the late Sir Thomas Preston, Bart., of Beeston Hall, Norfolk.

HUNT—BAWTREE.—On the 16th inst., at St. Mary-at-the-Walls, Colchester, by the Rev. Canon Luard, Vicar of Stanstead, Essex (uncle of the bride), assisted by the Rev. J. W. Irvine, Rector and Rural Dean, and the Rev. J. G. Bullock, Rector of St. Nicholas and St. Runwald, Edgar Atlee Hunt, M.R.C.S., L.R.C.P., L.S.A.Lond., of Colchester, eldest son of Josiah Hunt, Esq., of Queen Anne's Gate, Westminster, and Putney, S.W., to Charlotte Mary, third daughter of John Bawtree, Esq., of Colchester.

PENFOLD—BAYNE.—On the 3rd February, at All Saints Church, Sandhurst, Victoria, by the Rev. J. Garlick and the Ven. Archdeacon MacCullagh, Oliver Penfold, M.R.C.S. & L.S.A.Lond., to Mary Louisa, second daughter of Alexander Bayne, Esq., of Montanvert, Sandhurst.

SEQUEIRA—STAFFORD.—On the 9th inst., at the Parish Church, Chiswick, Henry J. Sequeira, M.R.C.S., L.S.A.Lond., eldest son of Henry L. Sequeira, M.R.C.S., of Waltham Lodge, Tulse-hill, and the City, to Inez W. R. Stafford (Nina), only daughter of William J. Stafford, Esq., of Bradmore House, Chiswick, W.

SHORE—SARGENT.—On the 20th inst., at St. Peter's, Regent-square, W.C., by the Rev. R. H. A. Bradley, Vicar, Thomas William Shore, M.B., B.Sc.Lond., M.R.C.S., &c., eldest son of T. W. Shore, Esq., of Southampton, to Mary Elizabeth, eldest daughter of H. E. Sargent, Esq., M.D., M.R.C.S., &c., of Shadwell. No cards.

WARD—LYNCH.—On the 16th inst., at St. Gregory's, Sudbury, Suffolk, by the Rev. T. Lingard Green, Rector of the Parish, assisted by the Rev. H. C. Jollye, of Westmount, Dover (brother-in-law of the bride), Allan Ogier Ward, M.B. & C.M., of Casita, Northumberland-park, Tottenham, to Leila Catherine, daughter of J. C. Lynch, Esq., M.R.C.S., of Sudbury, Suffolk. No cards.

DEATHS.

HARRISON.—On the 15th inst., at Gipsy-hill, Upper Norwood, S.E., Joseph Harrison, M.D., eldest son of the late Thomas Harrison, of Lotamore, Glanmire, co. Cork, aged 70.

LEEMING.—On the 16th inst., at the Victoria Hotel, Southport Robert Toulmin Leeming, F.R.C.S.Ed., M.R.C.S., & L.S.A.Lond. (of Kendal), aged 58.

PUDDICOMBE.—On the 17th inst., at Dartmouth, Devon, John Morgan Puddicombe, F.R.C.S., aged 70.

SMITH.—On the 12th inst., at Greenhill, Weymouth, William Johnson Smith, M.D., aged 72.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, April 23rd, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 17	30·03	N.E.	46	44	89	64	41	·33	Cloudy
,, 18	30·15	N.E.	47	45	99	67	40	...	Hazy
,, 19	30·31	N.E.	57	52	107	71	44	...	Bright
,, 20	30·33	W.	56	50	110	75	46	...	Hazy
,, 21	30·15	W.	59	50	112	74	47	...	Bright
,, 22	29·86	S.W.	60	54	109	70	54	...	Cloudy
,, 23	29·77	W.	53	50	...	...	49	·02	Cloudy

Medical Diary for the ensuing Week.

Monday, April 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Althaus: A case of Syphilis of the Brain.—Dr. West: On Hæmaturia in Granular Kidney.—Dr. Herbert Snow: On the Free Use of Caustic Potash in the Treatment of Cancer of the Cervix Uteri.

Tuesday, April 28.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. A. L. Lewis: On the Past and Present Condition of Certain Rude Stone Monuments in Westmoreland.—Rear-Admiral F. S. Tremlett: Quadrilateral Constructions near Carnac.—Mons. Jean L'Heureux: The Kekip-Secoators or Ancient Sacrificial Stone of the North-West Tribes of Canada.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Doran: Notes on so-called Non-ovarian Dermoid Tumours.—Dr. Hale White: On the Pathological Histology of the Semilunar and Superior Cervical Sympathetic Ganglia. Dr. Hale White will exhibit a series of Microscopic Specimens in illustration of his paper at 8 P.M.

Wednesday, April 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, April 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

Friday, May 1.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn will show a Heart with Ante-mortem Clots in Right Ventricle which have Suppurated; Abscess in the Brain of a Child aged eight; Primary Sclerhus of Liver.—Mr. Burrows will show some Experiments with Pancreatine.—Mr. R. Hurry Fenwick: Latent Calculus.—Mr. Bruce-Clark: A case of Cancer of the Prostate.—Mr. C. B. Keetley: Antiseptic Surgery at the West London Hospital.

ROYAL INSTITUTION.—1.30 P.M. Annual Meeting.—9 P.M. Lord Rayleigh: Water Jets and Water Drops.

Saturday, May 2.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. W. Carruthers: Fig-trees and their Allies.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

WHAT DEATH-RATE CHARACTERIZES A "PERFECT PARADISE."

A MEMBER of the Romford Local Board considers that locality a "perfect paradise." The reason, apparently, of his enthusiasm is hygienic rather than sentimental. It seems that the Local Board began its existence in 1854 with a death-rate in their district of 28 per 1000. By means of hard work and judicious administration this is now reduced to 15·8 per 1000. Though the Board has certainly something substantial on which to congratulate itself, Dr. Richardson would tell them that the goal of a hygienic paradise was still a long way ahead.

Dr. J. Warner.—We think it would be premature to notice the matter, as the gentleman in question has not yet, we believe, been formally asked to come forward as a candidate.

G. B. (East Finchley).—We cannot insert the appeal. Perhaps an application to a society such as that in St. George's-road, S.W., might be useful.

"WHOOPING-COUGH."

To the Editor of THE LANCET.

SIR,—In reply to Mr. Burman I beg to state—(1) The paroxysms of whooping-cough are, in my experience, always more frequent at night, whether the patient sleeps or not. (2) I have noticed that they are most frequent about 2 or 3 o'clock in the morning, at which hours the air is most chilly and the temperature of the body lowest. (3) The child awakes from sleep, evidently suffering from a sense of irritation in the throat, and cries at the unconquerable tendency to cough, which it seems to dread; but the more profound the sleep, the less is this tendency. (4) Cold and exposure appear to induce attacks quite as frequently as the act of deglutition.

The treatment of this disagreeable and fatal malady will, of course, depend upon the theory framed as to its exact nature. Though generally induced by direct infection, whooping-cough frequently follows attacks of bronchitis and ordinary catarrh. I regard it as essentially a subacute inflammatory condition of the mucous membrane of the larynx. In its first stages there is no noticeable whoop during inspiration, but simply a short cough. This becomes more prolonged as the disease progresses, until, when the paroxysms are most intense, every particle of air seems to be expired in a rapid series of what might be termed "glottic explosions," and the child, now almost suffocated, again inspires, the air producing a falsetto note by reason of the contraction of the vocalising muscles during the inspiratory effort. The phlegm secreted is at first purely of a mucous nature, but as the disease develops and becomes chronic it assumes a muco-purulent character. The presence of a parasitic organism is, I consider, the result, not the cause, of the disease, and is, I should think, never noticed in its earlier stages, but only when, from the continued inflammatory action, the parts have become prostrated in vital power, and unable in consequence to resist its growth and development in their vicinity.

I have found a popular remedy very efficacious in the treatment of whooping-cough. I refer to picked oakum worn by the patient either round the neck in muslin or on the chest as a pad stitched to the underclothing. Locally I apply the glycerine of tannic acid with a laryngeal brush two or three times a day, and internally I prescribe one-, two-, or three-grain doses of chloral, one, two, or three minims of belladonna, one grain of alum, and one minim of carbolic acid, in syrup, every two or three hours. A liniment of turpentine, acetic acid, and yelk of egg is an excellent application for the chest, back, and neck night and morning, with the liniment of belladonna added in the proportion of 1 to 7. In children of two years or more, I have applied carbolic acid and glycerine, in the proportion of 1 to 15, to the larynx with success, each application checking a paroxysm at once. With the above-mentioned treatment I cure the worst cases in from seven to ten days.

I am, Sir, yours truly,

Clayton-le-Moors, April 16th, 1885. C. R. ILLINGWORTH, M.D.Ed.

PROVIDENT DISPENSARIES.

PROVIDENT DISPENSARIES may be very good things; but they may be abused, either by being made available for persons who are not entitled to use them, or by being made the means of indiscriminate advertisement in handbills scattered broadcast. A bill of this kind has been sent us from Cardiff with the names and addresses of ten or twelve medical men.

Mr. J. L. Stretton.—We do not perceive any legitimate ground for interference.

"DISINFECTANTS."

To the Editor of THE LANCET.

SIR,—Your report of the paper recently read by Mr. Wynter Blyth before the Society of Medical Officers of Health on the "Action of Disinfectants on Microzoolds" (see THE LANCET, April 4th, 1885, p. 631), will doubtless interest those investigators working in the discovery of bacilli and of germ-destroying agents. The facts connected with the properties of the pyridine bases, as disclosed in the valuable researches of Mr. Wynter Blyth, and referred to in the paper read before the Society, are of considerable import, and fully confirm the views and opinions of previous observers who have studied the compounds named. It may be of interest to state that they may now be obtained commercially in quantity; and that disinfecting powders and fluids containing a proportion of the bases in conjunction with carbolic acid are already in the market. Fluids also containing these substances are in successful use as washes for exterminating scab, acari, and parasites in sheep and other animals. Referring more generally to the pyridine bases, it may be mentioned that in an article appearing in the *Boston Medical and Surgical Journal* for July 14th, 1881, pointing out the high value and utility of certain phenylic washes (used at the Massachusetts General Hospital in the antiseptic treatment of surgical cases) that were found to be practically free from carbolic acid, and concerning which there was some speculation as to the active constituent, it was ultimately found that these compounds were present in sufficient quantity to impart the character observed, and to which Mr. Wynter Blyth now points as bacillus-destroying agents of great potency. From my own knowledge and observation, I would venture to predict a wide rise in the future employment of these basic compounds for the treatment of various skin diseases of parasitic origin, used either in aqueous solution or as pure substances, and would commend them to the notice of medical practitioners for this purpose. Having prepared and supplied the pyridine bases referred to and used by Mr. Wynter Blyth, I shall have much pleasure in furnishing samples to those investigators who may wish to make trial of their specific qualities. I am, Sir, yours faithfully,

BENJAMIN NICKELS, F.C.S., F.I.C.

Leadenhall-street, E.C., April 20th, 1885.

Mr. W. Brown.—The drug should be given with great care. Pregnancy does not absolutely forbid its administration.

Mr. L. Hudson.—Vacancies are announced in our advertising columns.

"MEDICAL PRACTICE IN THE UNITED STATES."

To the Editor of THE LANCET.

SIR,—I presume I, as a graduate of New York, must answer the questions of "Medicus" in your issue of the 11th inst. As a general rule, respectable medical colleges in the United States require the last course of lectures to be taken out, and the passing of a practical examination, before granting an *ad eundem* degree. It does not much matter where the applicant has previously studied, or what qualifications he possesses. I may add, however, that with the qualifications your correspondent holds he would not be debarred from practising in any portion of the States; but he might have difficulty in a legal matter if involved therein. "Medicus" will not, however, find it a matter of so much difficulty as it is in the mother country for a foreign practitioner to carry on his profession; and he may rest assured that if he makes the acquaintance of the authorities in any State where he wishes to reside he will have every courtesy shown him, and every facility given to make him acquainted with anything he may wish to know. There is not that exclusiveness in friendly relations betwixt caste and its privileges *versus* new comers as is generally maintained in old countries.

I am, Sir, yours faithfully,

April 13th, 1885. AN M.D. OF NEW YORK.

CASCARA SAGRADA FOR CONSTIPATION.

To the Editor of THE LANCET.

SIR,—With reference to the subject of the action of cascara sagrada, which has lately been discussed in your columns, I beg to say that for the last two years I have taken it for the relief of habitual constipation arising from sluggish action of the liver, and have found its effects upon myself somewhat different from what your correspondents describe. It has always acted as an efficient hepatic stimulant, as evidenced by the increase of the fæcal colouring matter, but only as a mild intestinal one, and that without producing any pain or griping. I take it uncombined in the form of one-drachm doses of the liquid extract of Messrs. Southall Brothers. In a case of severe constipation in which I lately prescribed it, combined with large doses of tincture of belladonna and nux vomica, it caused considerable griping, and acted most powerfully on the intestines. The preparation dispensed was that of a different firm from the one I myself use.—Yours truly,

April 6th, 1885. T. L. K. DAVIES, M.B.

THE MISCARRIAGE OF MEDICAL EDUCATION.

Dr. Bernard O'Connor.—It is not profitable to cry over spilt milk, or to waste time in debating the question, Who were responsible for the miscarriage of medical legislation last year? Happy are those who feel themselves free from blame! Dr. O'Connor thinks Dr. Farquharson's explanation satisfactory. We do not.

A CASE OF MISSED LABOUR.

To the Editor of THE LANCET.

SIR,—A short description of the following case may be of interest to some of your readers.

On the evening of July 22nd, 1884, I was called to see Mrs. M. T——, a patient who had been expecting her second confinement, when she gave me the following history:—She last menstruated at the end of September or beginning of October, 1883, but was not sure of the time of quickening. The pregnancy was perfectly natural up to the middle of April, 1884, when the movements of the fœtus, which had been well marked, ceased. From this time she did not increase, but rather diminished, in size, and immediately a cold heavy weight was constantly felt in the abdomen, and a discharge, sometimes of blood, sometimes of yellowish slime, began. On the morning of July 22nd, 1884, labour pains commenced, the waters breaking, and a large quantity escaping. She expressed herself as having been in fairly good health up to this time. Her only child was nine years old, the husband having been absent at sea for a long period. On my visit at 10 P.M., I found a healthy-looking Scotch woman, aged thirty-three, not suffering from any labour pains, with the uterus projecting two inches above the umbilicus, and some loose membrane protruding from the os, which was rigid and would only just admit the point of the finger. Her general condition was good.—23rd: Sanguineous discharge all night; uterus level with the umbilicus; os the same size. There was some slight attempt at labour pains.—24th: The uterus and os in the same state; a small piece of membrane was discharged. There were no pains.—25th: Discharge becoming offensive.—26th: Feverish symptoms and rigor; portion of hairy scalp passed; discharge fetid; slight tenderness over the uterus. Up to this date the treatment had consisted of the administration of ergot and antiseptic injections, but the symptoms having become serious I obtained permission to interfere. On the 27th, the patient being under chloroform, I introduced my forefinger through the rigid os and felt the skull, denuded of its scalp, presenting. An attempt was then made to dilate the os with the fingers, but the part was so rigid that an extensive laceration was made. The skull was now taken away piecemeal; finally the remainder of the fœtus was extracted, the entire placenta following, and the uterus was washed out. The fœtus was apparently between the sixth and seventh month. Extensive decomposition had set in, the muscles of the back being bare. All went well with my patient until the third day, when, in spite of constant antiseptic uterine injections, a severe rigor occurred, and a sharp attack of septicæmia followed. Four weeks after this, when almost convalescent, she had a relapse, and for six weeks was very ill with peritonitis. However, in the end, she got the better of her septicæmic symptoms, but was left in a terribly emaciated condition. At the present time she has regained her former weight, looks remarkably well, is able to attend to her domestic duties, and has menstruated regularly three times. There is some erosion of the os consequent on the laceration.

I am, Sir, yours faithfully,

Devonport, April 7th, 1885. W. W. PRYN.

"WORCESTER URBAN DISTRICT."

To the Editor of THE LANCET.

SIR,—In your remarks on the eleventh annual report of the Medical Officer of Health for the City of Worcester you state: "In seeking advice the opinion of the borough analyst has been sought, especially as to whether filtration would secure the inhabitants against 'this great source of danger' (i.e., 'pollution by the germs of disease'), and he has answered, 'If efficiently carried out, I believe it does.'" My opinion has neither been asked nor given. I have merely sent reports giving an opinion which Dr. Strange has quoted in his report, and which certainly do not bear out such a statement. Dr. Strange, in making the remarks you quote, was referring to a question which he asked himself and answered himself in his tenth report. When the Kidderminster sewage pumps broke down, and the typhoid excreta of 500 patients was discharged into our waters, I had very grave apprehensions of what results would follow, and must confess that I was agreeably surprised that the danger was at any rate minimised by the effective condition of our filter beds; but it was an experiment so perilous that I should not like to see it repeated. My report, which to avoid a panic was sent in privately and not for publication, clearly showed what I thought of the danger.

I am, Sir, yours faithfully,

HORACE SWETE, M.D.,
Analyst to the County and City of Worcester.

Worcester, April 11th, 1885.

*** On again reading Dr. Strange's report, we find that the expression of opinion as to what filtration can do is his own, and not Dr. Swete's, whom we failed to identify as the analyst referred to. We were misled by the words in question being quoted in inverted commas in a sentence which in the same way quotes Dr. Swete's opinion as to the insufficient filtration carried out.—ED. L.

EARTH-CLOSETS.

Alpha.—If earth-closets be properly constructed and properly managed, we know of no objection to their use in-doors. The best form of closet to secure is the one manufactured by the Moule's Earth-closet Company, which received the Gold Medal of the International Health Exhibition. Its special feature consists in the very efficient manner in which the dry earth is uniformly distributed over every portion of the excreta in the receptacle. The size of the pail will necessitate frequent emptying, and this is a distinct advantage in the case of an in-door earth-closet. Our correspondent should remember that the earth must be *dry*, and *finely divided* by passage through a sieve, and then, apart from excessive wetness of contents, careful supervision is alone necessary to ensure success.

Justice.—1. Yes.—2. Yes.—3. No; but the presence of another medical practitioner is frequently desirable, as he could be called upon to give confirmatory testimony.

M.D., Late Assistant, and *Cedric* have not enclosed their cards.

FALSE TITLES AND THEIR BASE USES.

To the Editor of THE LANCET.

SIR,—We are constantly reading in your Answers to Correspondents that certain titles do not carry the right to the prefix of "Dr." With this I entirely agree. I think it is time, and even necessary, for some protest to be made against the increasing practice of addressing medical men who are not M.D.'s as "Dr." Of course, of the lay public, who do not know better, we cannot complain; but I do protest against medical men themselves addressing others, whom they know are not entitled to the designation, as "Dr." this and "Dr." that, not only in the course of conversation but in correspondence. This practice is even now becoming common with societies composed of medical men; only during the last week two medical associations, obtaining my name I presume from the Directory, wherein I appear as "L.R.C.P. Lond." and "M.R.C.S. Eng.," addressed me as "Dr." To my mind this system of mutual "back-scratching" is bad form, undignified, and unbecoming amongst members of a learned profession, and calculated to bring us into ridicule and contempt.

Allow me to recount a true tale to point a moral. Not many years ago, in the metropolis, there was a post vacant for a medical officer of health. There were many candidates, for it was a good appointment, and amongst them were two special favourites in the betting. The first favourite, having very great influence, was considered bound to win; but he had always been in the habit of calling himself "Dr.," had "Dr." on his door-plate and "Dr." on his visiting card, and naturally by the public was thought to be an M.D. But he was not; he was simply L.R.C.P. Ed. The second favourite was plain "Mr." At the meeting of the vestry for the final settlement of the conditions of election, the principal supporter of the first favourite suddenly hit upon a brilliant idea, as he thought, to oust the second favourite and to secure for his friend the appointment. He therefore proposed and carried that it should be a *sine qua non* that the future medical officer of health should be M.D. One can imagine the tableau when, on rushing off to tell his friend the clever electioneering trick he had succeeded in, the latter had to confess he was a sham, and not M.D. after all!

I am, Sir, your obedient servant,

April 11th, 1885. ANTI-HUMBUG.

AGORAPHOBIA.

To the Editor of THE LANCET.

SIR,—Can any of your readers suggest a treatment for what I suppose I may call a case of agoraphobia? My patient is a young lady aged twenty-two, with a tendency to constipation and occasional attacks of hæmorrhoids. The first symptoms of a dislike to going out alone showed themselves about two years ago. She was for a long time ashamed to speak of this, and made all kinds of excuses to avoid the necessity of a solitary walk. But now she dare not walk twenty yards alone. If any chance compels her to do so, she feels almost paralysed, unable to stir, and violent palpitation comes on; but if a friend joins her, she can walk actively and for a considerable time, and will appear bright and happy and in apparently perfect health. There is no organic heart disease, and the catamenia are regular. No cause can be assigned for the commencement of the affection. Tonics, such as iron, nux vomica, and arsenic, have been used, also the bromides of potassium and sodium. The family history is good. Any hints as to treatment would be highly acceptable.

I am, Sir, yours faithfully,

Bradford, April 19th, 1885. W. HILL EVANS, M.D.

"IMPROVED FRACTURE BOX."

To the Editor of THE LANCET.

SIR,—In your last issue Mr. T. G. Nasmyth says that he has already used a fracture box similar to mine for two years. Permit me to state that I think he does not quite understand the construction of the apparatus for which I claim invention. 1. He does not allude to the sliding reversible splint which forms one of the sides of my fracture box. 2. No one has as yet used a hinged foot-plate with such a regulating screw as I have devised. 3. There is no ratchet, as it would add to the cost. 4. Ferguson has already used perforated splints, but not as I do—as a means of attachment; and to Rhases, an Arab doctor of the twelfth century, belongs the invention of keeping fractures in position by straps.

I am, Sir, your obedient servant,

Midleton Hospital, April 20th, 1885. JAMES J. FOLEY, M.R.C.S.E.

BLOOD-POISONING TREATED BY HYPODERMIC INJECTION OF CARBOLIC ACID.

To the Editor of THE LANCET.

SIR,—I think the following mode of treatment of a not unfrequent and sometimes fatal condition worthy of note.

R. S——, a slim, delicate-looking lad, aged sixteen, received a cut from a knife charged with putrid matter across the palmar aspect of the third and fourth fingers of the left hand. On the morning of the second day after the occurrence the patient felt chilly and generally unwell. On my arrival, a few hours afterwards, I found the lymphatics of the arm inflamed, tenderness of the glands in the axilla, and a temperature of 101·4° F. Nine hours afterwards the patient complained of sickness, with occasional vomiting, and increased pain, with stiffness in the axilla. There were a more diffused redness of the limb and a temperature of 103·8°. I now injected six minims of a 4 per cent. solution of carbolic acid into the unaffected arm. After twelve hours the patient felt better, and the temperature had fallen to 101·8°. The injection was repeated, and no local applications were used. The patient then rapidly recovered, and in twenty-four hours every symptom had disappeared. I am, Sir, your obedient servant,

Wick, April 11th, 1885. A. G. AULD, M.B.

W. T. H.—The lectures on Medical Jurisprudence delivered at any of the medical schools would meet the requirements of our correspondent. He can take out a single course without having entered as a medical student.

T. S. K.—Application might be made to the Hospital in Queen-square, or to the Institution in Portland-terrace, Regent's-park.

Mr. Frederic Hewitt.—The paper is marked for early insertion.

THE TITLE OF "DOCTOR."

To the Editor of THE LANCET.

SIR,—I see the Colleges of Physicians and Surgeons are about to take into their consideration, if they have not already done so, the propriety of allowing the Licentiates of both institutions to take the title of "Doctor." Will they extend their consideration a little further—namely, to the repayment to those who have taken, besides their licences, the degree of "Doctor" at a University, with the expenditure of a considerable amount of inconvenience, time, and money, on account of the higher standing this title, so honourably obtained, was supposed to confer upon them? If they do not do this, I for one must consider I have been mercilessly robbed. It is singular that the outcry of a few who have no right whatever to complain, inasmuch as they have never subjected themselves to these inconveniences, &c., should be able to overthrow and reduce to no value the labours of those who have undergone them all. I am, Sir, yours obediently,

April 22nd, 1885. M.D.

G. P.—We do not understand the question as it is put.

A Medical Student.—We cannot notice the "miserable" print.

ERRATUM.—In our leader on Reform at the College of Surgeons, p. 713, col. 1, line 4 from bottom, "The Board of Examiners" should be "The Court of Examiners."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Suckling, Birmingham; Mr. Annandale, Edinburgh; Prof. Geo. Buchanan, Glasgow; Prof. McKendrick; Mr. W. F. Somerville; Mr. Macdougall, Chesterfield; Mrs. Tillett, Dudley; Mr. Birchall, Liverpool; Dr. Herbert Snow, London; Mr. Fred. Neves, London; Mr. Reginald Harrison, Liverpool; Mr. Dittridge, London; Mr. Alder Smith, London; Mr. Pearse, London; Dr. Cook, Tendring; Mr. Freeman, London; Dr. Illingworth, Clayton-le-Moors; Mr. M. G. Evans, Cardiff; Mr. Aikman, Guernsey; Dr. Hawksley, Brighton; Mr. R. T. Manson, Darlington; Dr. W. H. Evans, Bradford; Dr. Pacchiotti, Turin; Dr. Wright, Southport; Mr. Cadge, Norwich; Mr. G. A. Kenyon, Chester; Mr. Lewis, Birmingham; Messrs. Hemming and Son, Cheltenham; Mr. Martin, Crawley; Mr. Russell, Liverpool; Mr. Fuge, Taunton; Mr. Saunders, Manchester; Messrs. Pemberton, Manchester; Mr. Bourne, London; Mr. Gray, S.E. Coast, America; Mr. Rigden, Canterbury; Dr. Alfred Meadows, London; Mr. B. R. Datt, Calcutta; Dr. O. N. Royle, Jersey; Mr. J. L. Stretton, Kidderminster; Dr. J. R. Morgan, Manchester; Mr. Leopold Hudson, London; Dr. W. Curran, London; Mr. Blandy; Dr. D. B. Pestonji, Bombay; Dr. Bernard O'Connor, London; Dr. T. I. Rowell, Singapore; Dr. W. Ewart, London; Mr. T. Deane, Birmingham; Dr. G. Oliver, Harrogate; Dr. Oxley, Liverpool; Mr. Macdonell, London; Mr. T. W. Thompson, Potter's Bar; Messrs. Richardson and Co., Leicester; Mr. W. H. Pearce, London; Mr. O. Dwyer; Mr. Young, Ardsley; Messrs. Wilkinson and Co., Borough; Miss Hertz, Manchester; Mr. J. Marsh, London; Dr. Seaton, Sunbury; Dr. Lewers, London; Rev. O. Allen, Tetsworth; Messrs. Ingram and Royle, London; Mr. Russell, Liverpool; Mr. Berthier, Paris; Mr. Chatfield, London; Mr. Charmers, London; Messrs. Mulliner and Co., Northampton; Messrs. Mackay, Edinburgh; Dr. Leiterchofen, Homburg; Messrs. Sydenham and Co., Bournemouth; Messrs. Smith and Son, Manchester; Mr. Rich, Leeds; Mr. Kuyle; Mr. Hopkinson, Nottingham; Mr. Leggatt, London; Dr. Heelas; Mr. Brown, Westgate-on-Sea; Mrs. Bourchier; Messrs. Lumley, London; Mr. W. H. Kesteven, London; Mr. Clifford, London; Mr. F. W. Hewitt, London; Mr. P. Birch, London; Dr. Spooner, Clapton; Dr. Horrocks, London; Mr. G. Duncan, Berlin; Dr. C. S. Taylor, London; Mr. Foley; Mr. W. A. Ellis, London; Mr. Elkerton, London; Mr. F. W. Friend, Douglas; Mr. Forfar, Silvertown; Dr. Farquharson, London; Mr. H. Willson, London; Messrs. Dolman and Pearse, London; Mr. Ford, Devonport; Mr. Martin, Southport; Mr. Unsworth, Liverpool; Dr. Squire, London; Mr. Craske; Mr. Brooks, Hull; J. H., Manchester; S. P.; K. D. M.; H. O. M.; M.D., Shepherd's-bush; J. B., Glasgow; Zero; Physician, Edmonton.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Wall; Mr. Hunter, Nelson; Mr. Wall, Wigan; Messrs. Bell and Co., Liverpool; Mr. Dalling, Colchester; Miss Hunt, Dublin; Mr. Wetwan, Southwold; Dr. Bower, Bedford; Mr. Leaming; Mr. Smith, West Hampstead; Mr. Foster, Green Hammerton; Miss Cooper, St. Mary Cray; Mr. Bennett, Ottley; Dr. Hughes, Llaniar; Mrs. Pudsey, Leicester; Mr. Marsh, London; Mr. Blake, Birmingham; Mr. Shore, Finsbury; Dr. Day, London; Mr. Partington, Tunstall; Mr. Taylor, Newcastleton; Mr. Rogers, Truro; Mrs. Griffith; Dr. Brown, Manchester; Mr. Jones; Mr. Thomson, Liverpool; Dr. Drummond, Prestonpans; Mr. BeLoe; Mr. Rigdie, Canterbury; Miss Chreiman, West Kensington; Mr. Williams, Oxford; Dr. Waugh; Mr. Currie, Wemyss Bay; Dr. Habershon, London; Miss Sidney, Brighton; Mr. Martin, Crawley; Dr. Royle, Jersey; Mr. Higginbotham, Glasgow; Mr. McMunn, Dromore; Mr. Brown, Fauldhouse; Dr. Jay, Leamington; Mr. Allen, Pemby; Miss Hertz, Manchester; Dr. Eberle, Thirsk; Mr. Boycott, Madeley; Mr. H. P. Potter, London; Medicine; J. J.; J. H. A.; M.D., Poplar; F.S.A., Wye; D., Cradley Heath; Medical, Peebles; M.D., Swanage; Registrar, Bath; X. Y. Z., Wigan; E. G.; Beta; M.D., St. Ive's; G. W.; R. S. T.; E. A. B., London; W. G. D.; E. P., Eastbourne; St. Dalmas, Leicester.

Dumfries and Galloway Gazette, Cork Examiner, Hampshire Advertiser, Madras Times, Liverpool Courier, Brighton Guardian, Westminster and Lambeth Gazette, Guernsey Star, &c., have been received.

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